

09858327 051501
TOST50" 22E85860

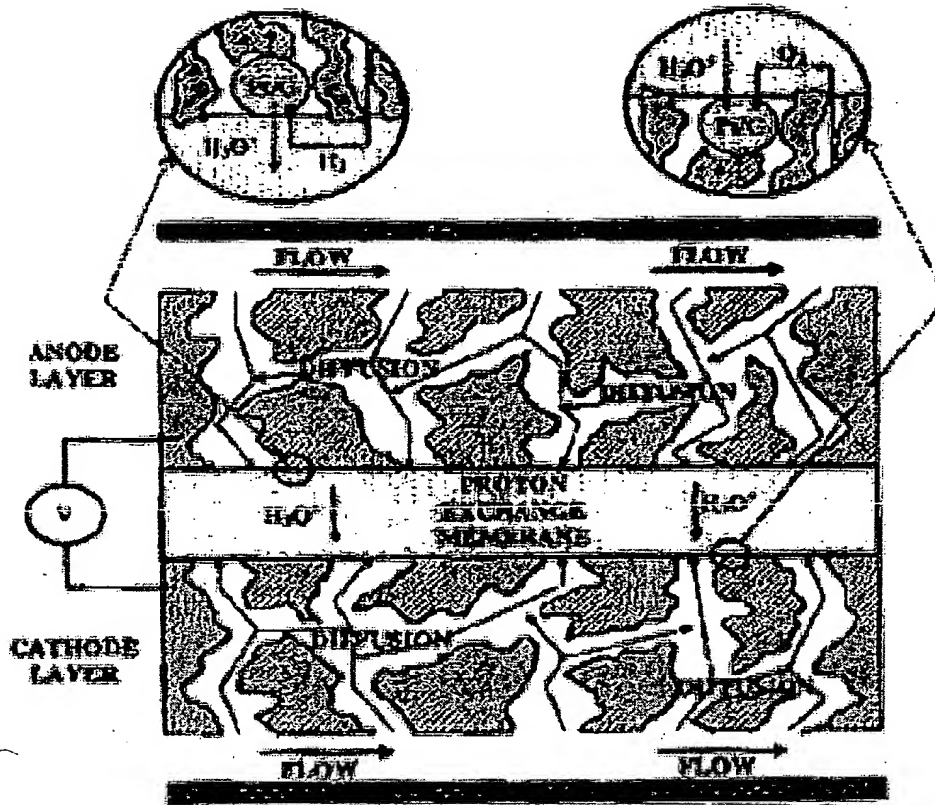


Figure 1A

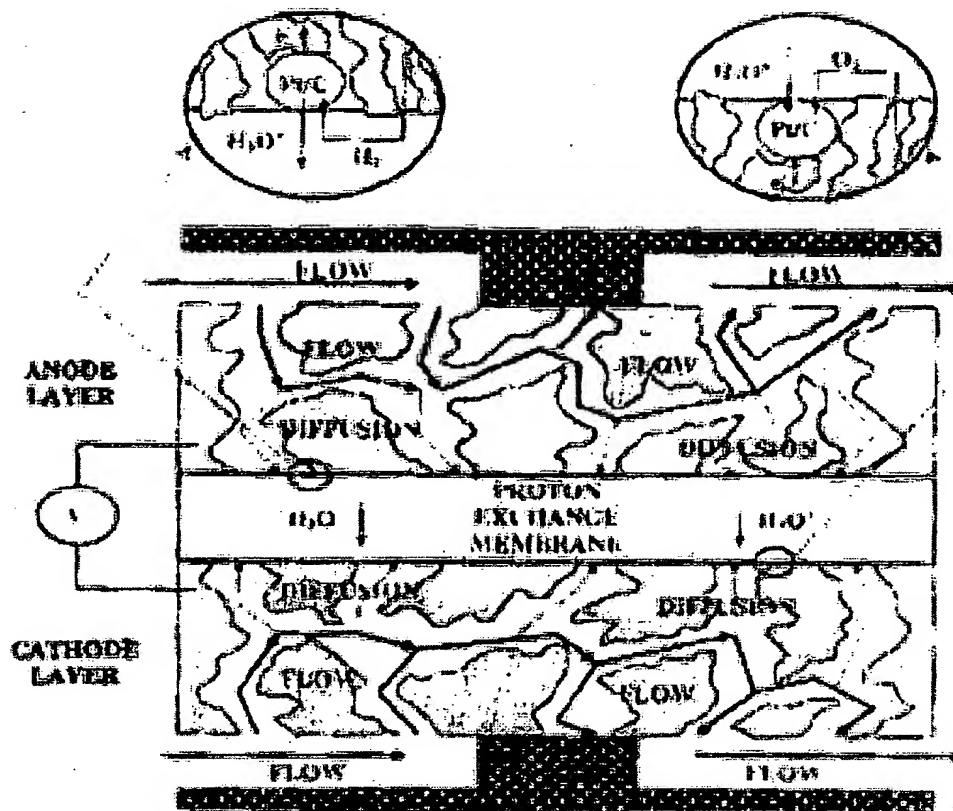


Figure 1B

09858327-051501

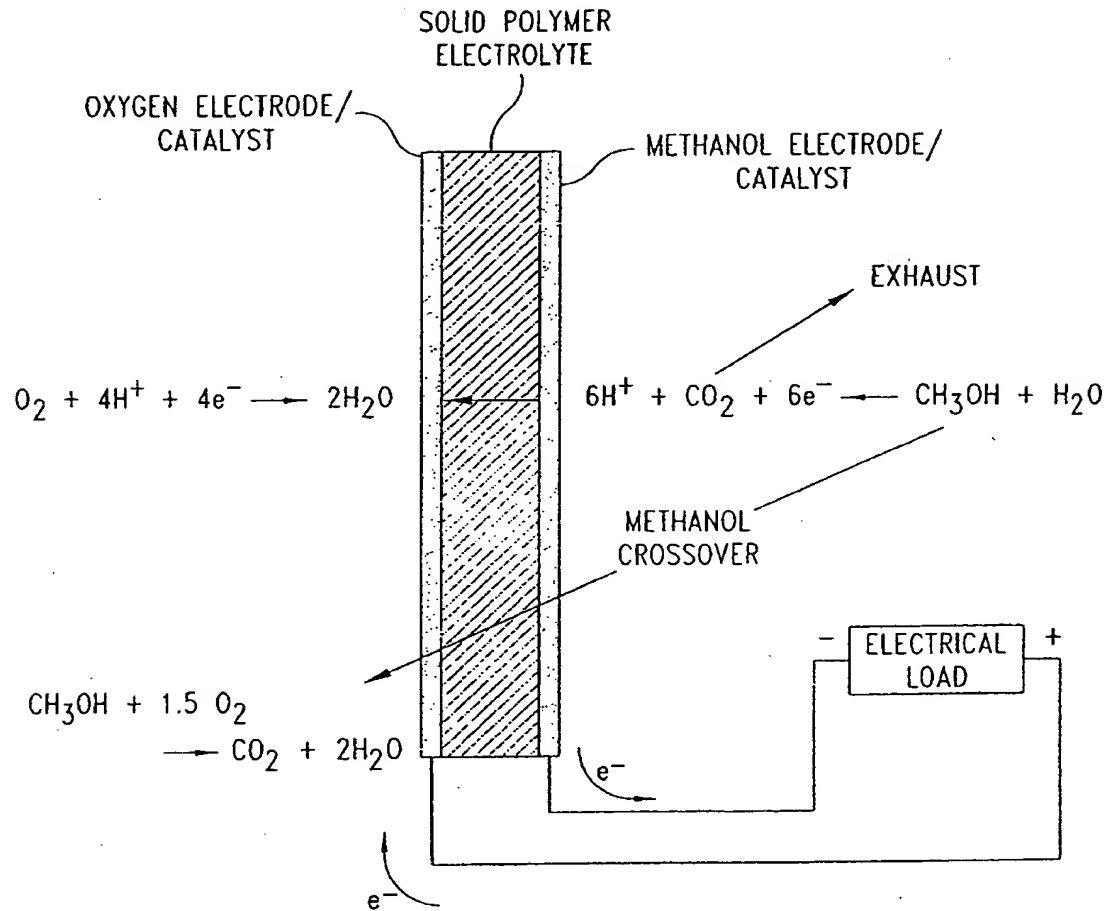


Fig. 2
(Prior Art)

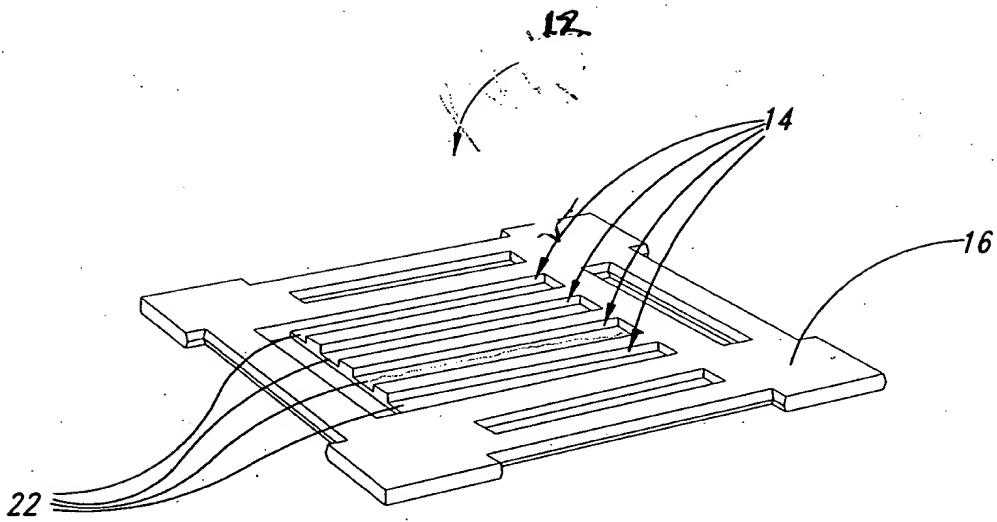


Fig. 3

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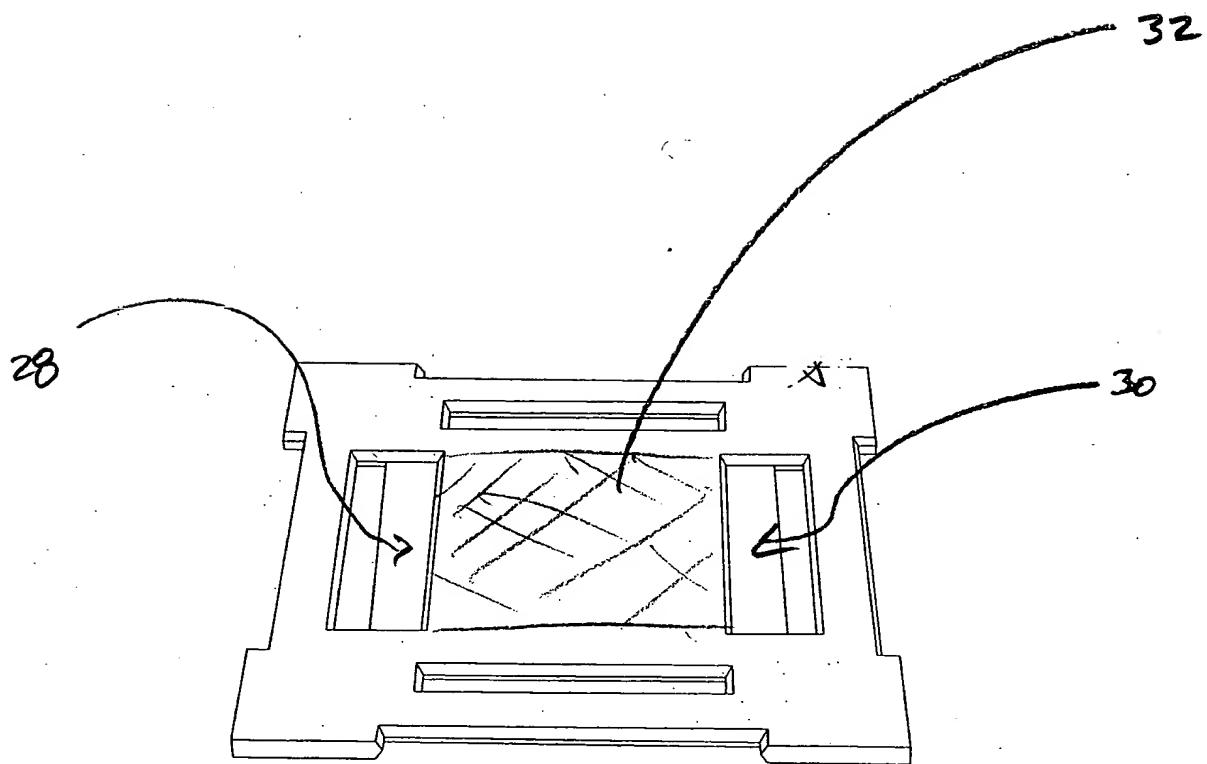


Fig. 4

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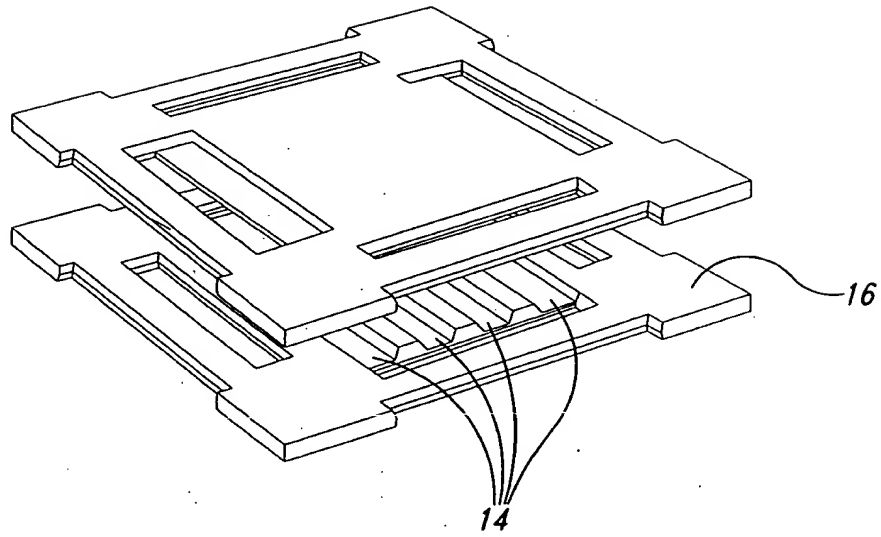


Fig. 5

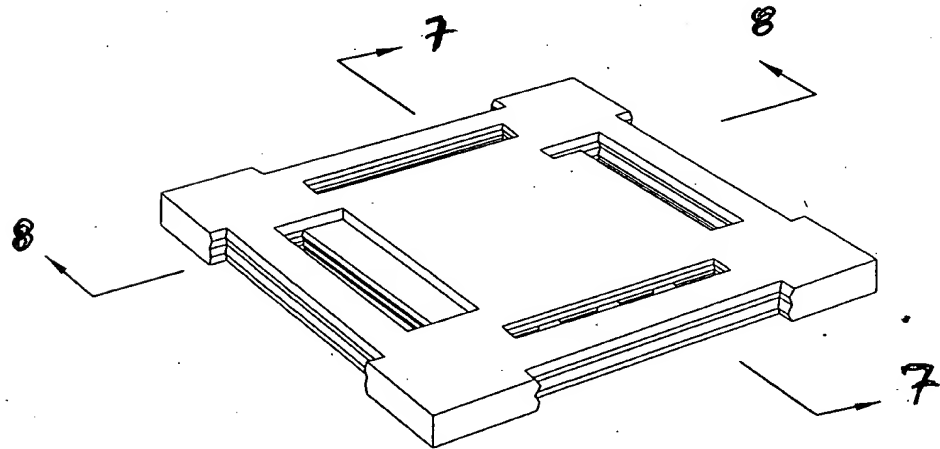


Fig. 6

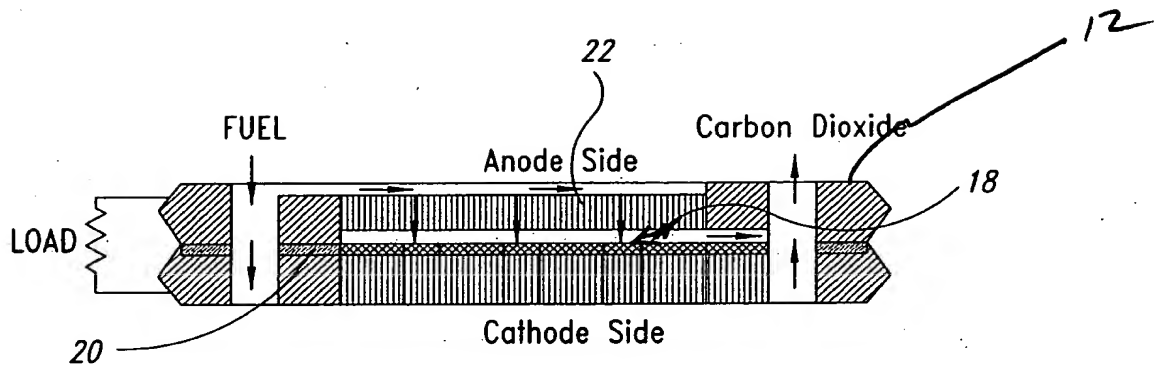
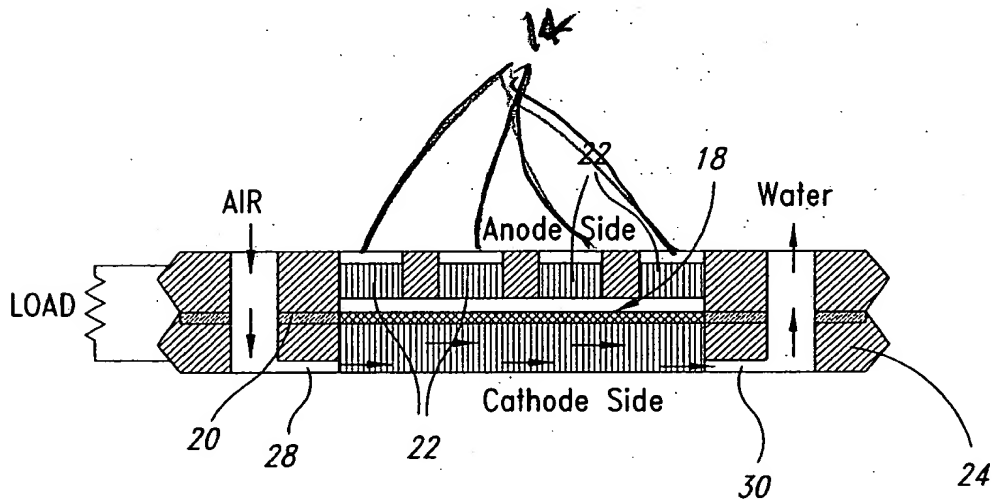


Fig. 7








- | | | | |
|---|-------------------|---|------------------------|
|  | Flow Channel |  | Porous Catalyst Region |
|  | Silicon Substrate |  | Methanol Barrier Layer |
| | |  | Wafer Bonding Material |

Fig. 8

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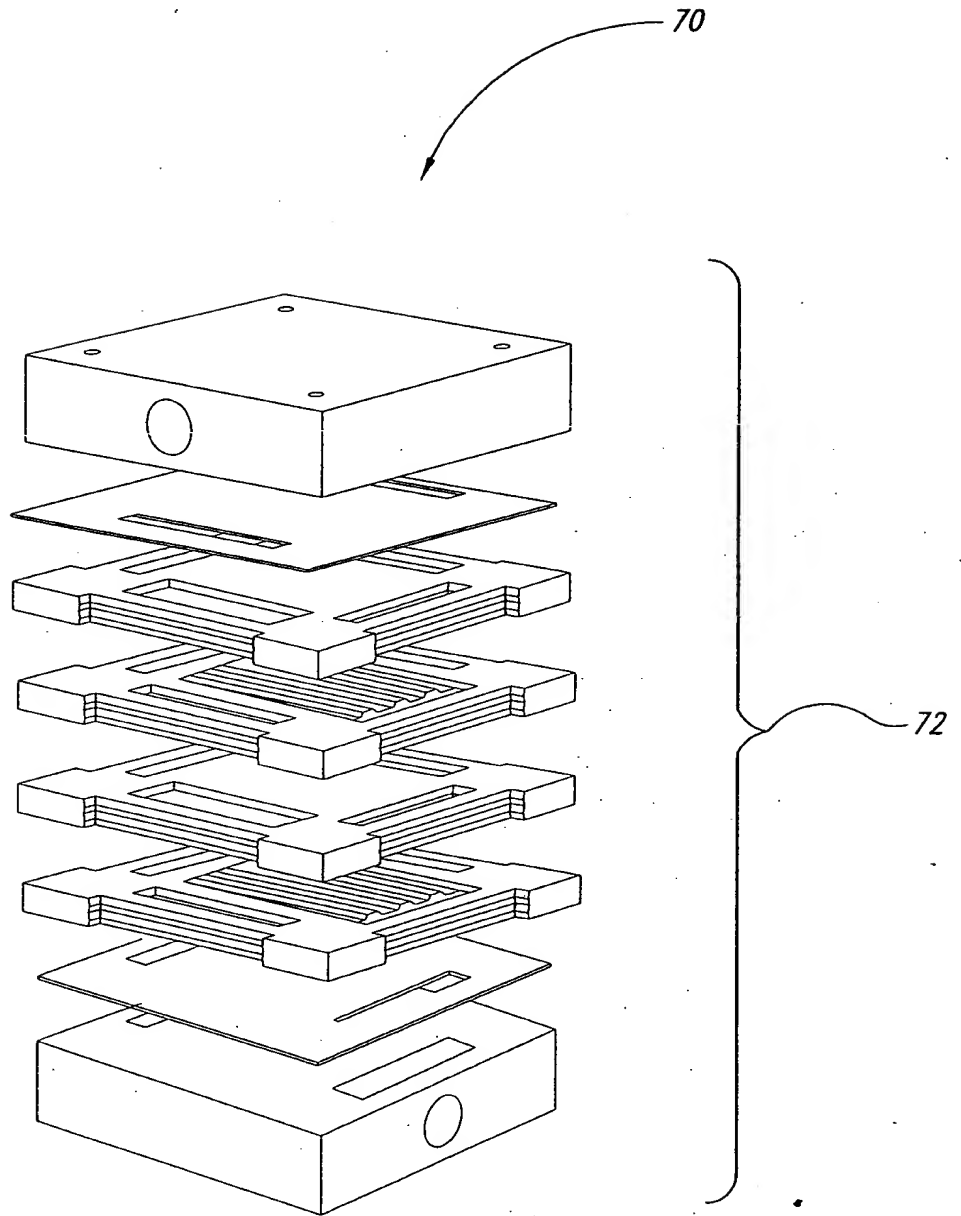


Fig. 9

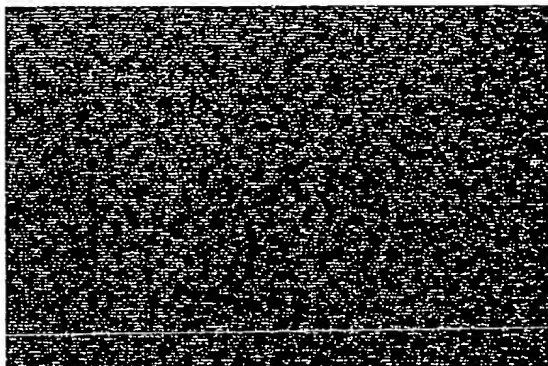


Fig 10A

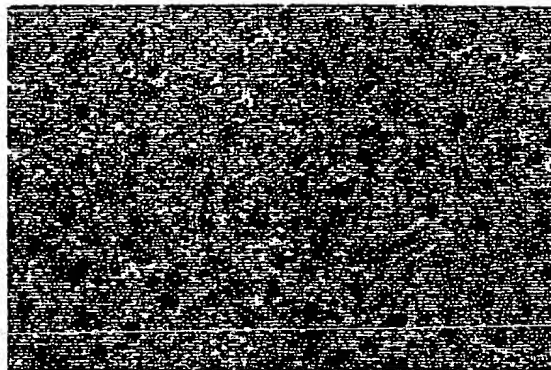


Fig 10B



Fig 11

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09858327.051501

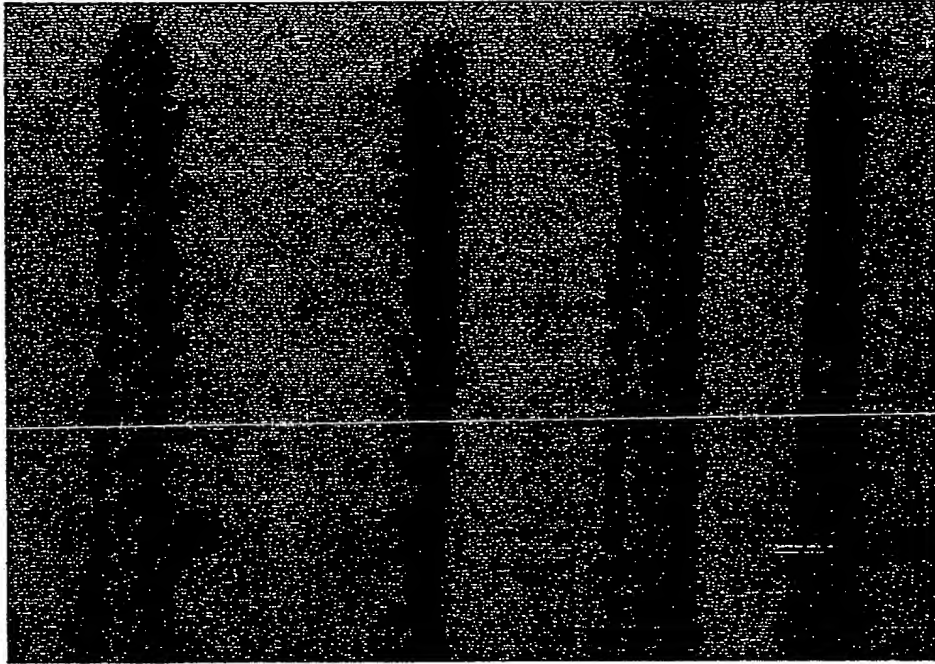


Fig. 12

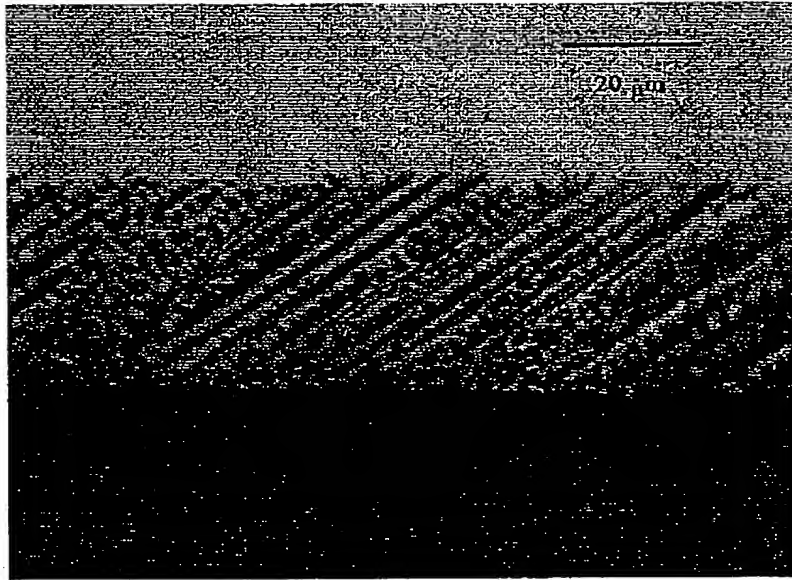


Fig. 13

09558327.051501

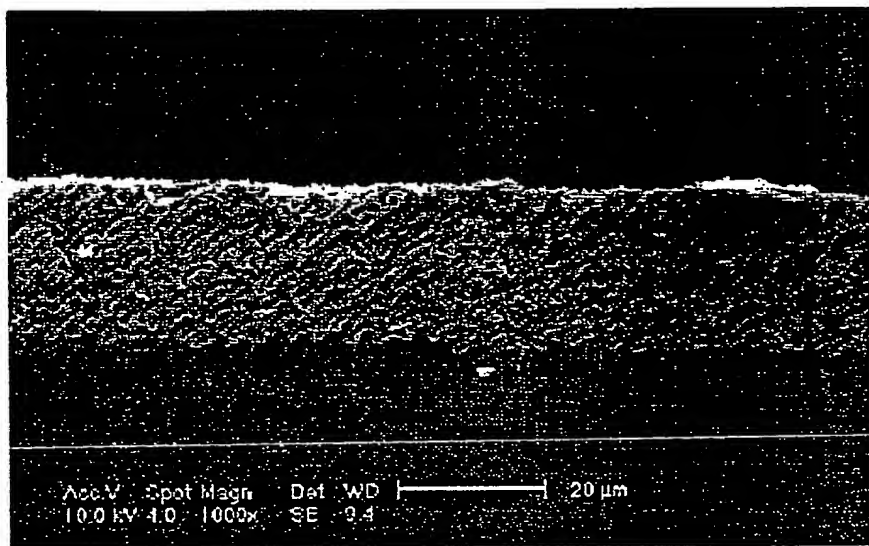


Fig. 14

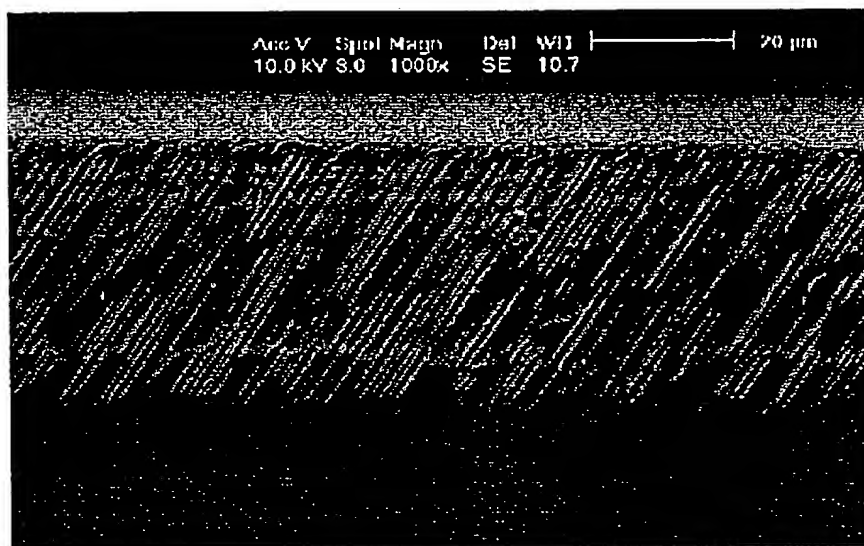
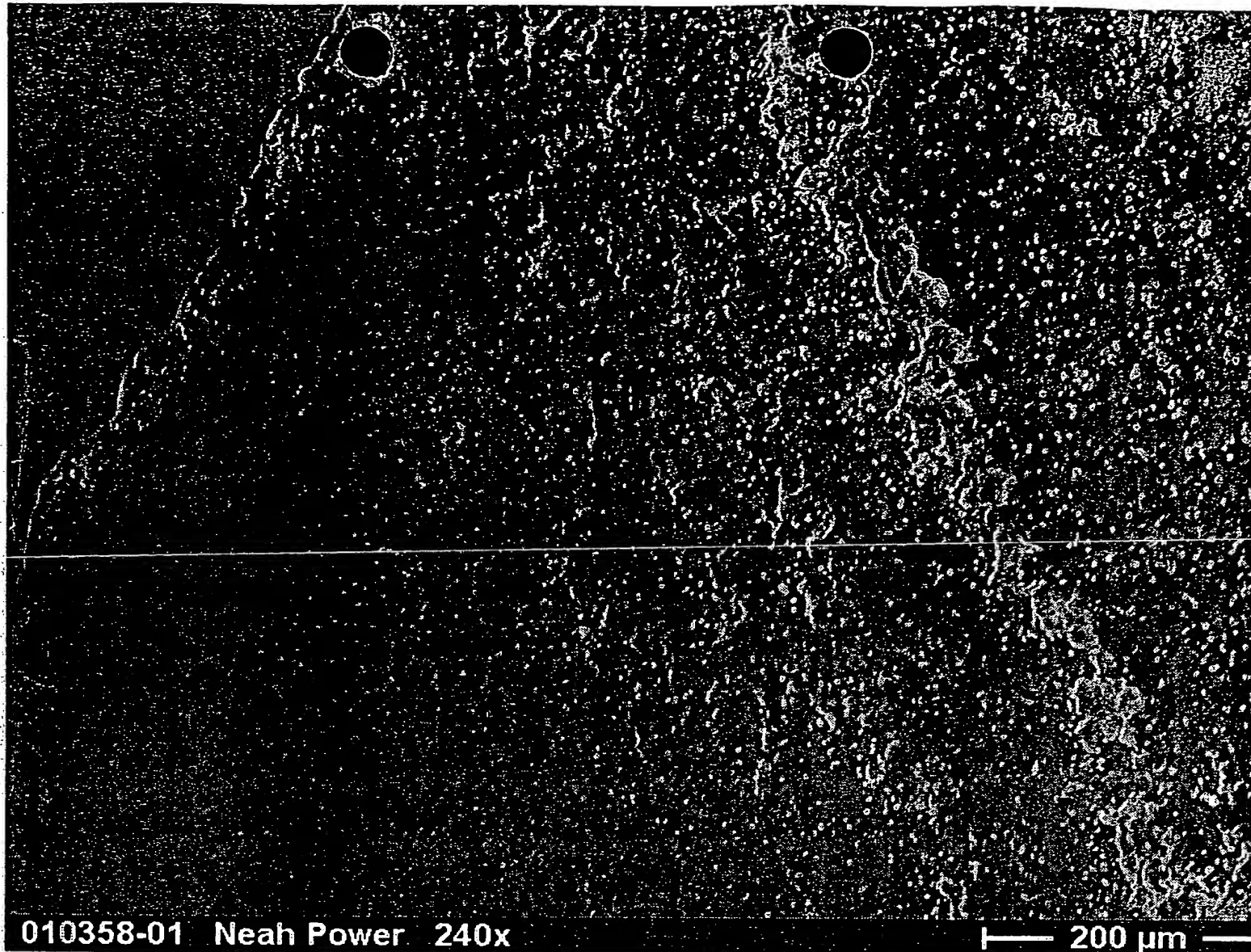


Fig. 15



010358-01 Neah Power 240x

— 200 μ m —

31

Fig. 1.2/6

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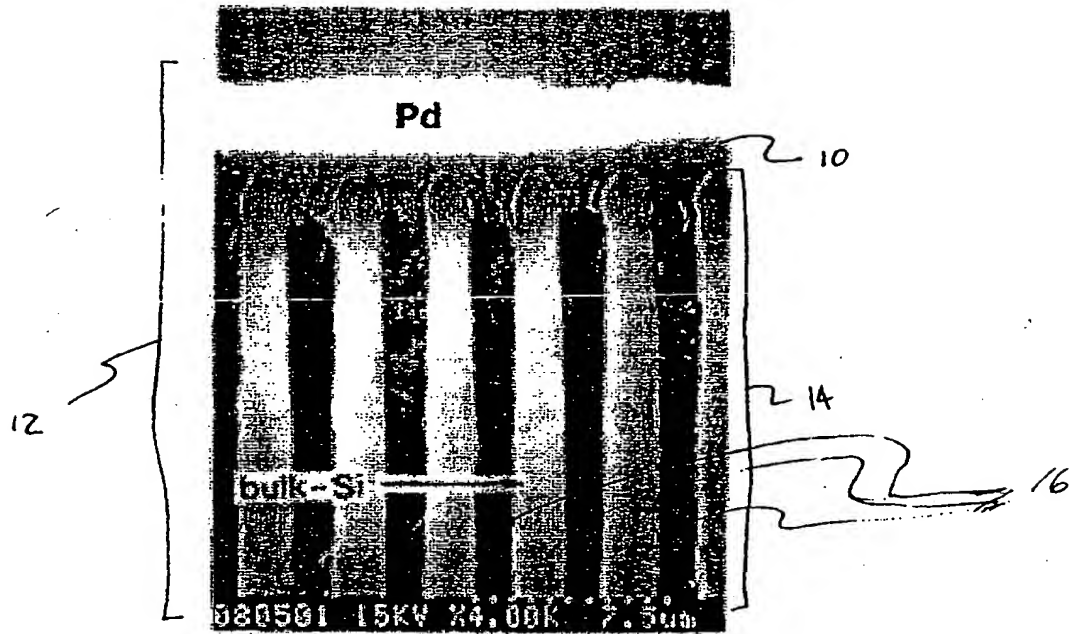
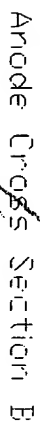
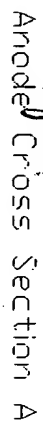
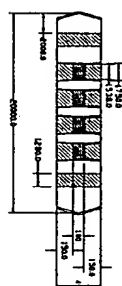


Figure ~~16~~ 17



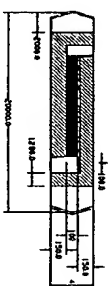
101 E. Independence City - 1490902 - 4th - 5th floor
 (childrens Hospital) open 10:00 AM to 6:00 PM
 4000 - 4th floor

[illegible]



F, 9 19 B

Cross Section A



~~Cross section E~~

Fig 19c

NOTE: Difference of 10 between 1000 and 10000
+ 10000 must be subtracted from 10000
total difference.

1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358</
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FIG. 1 - CATHODE ELECTRODE

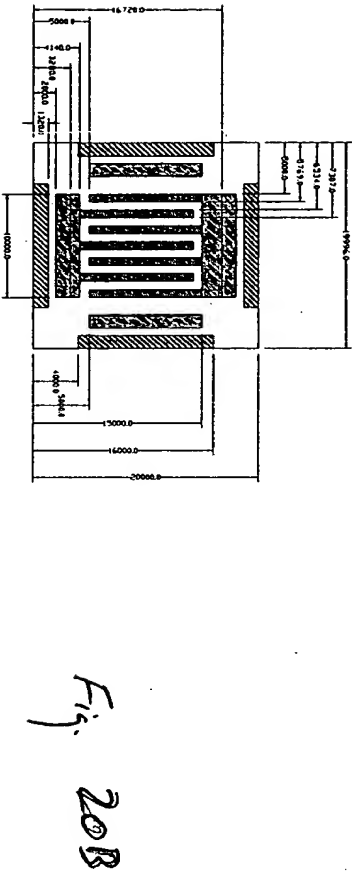
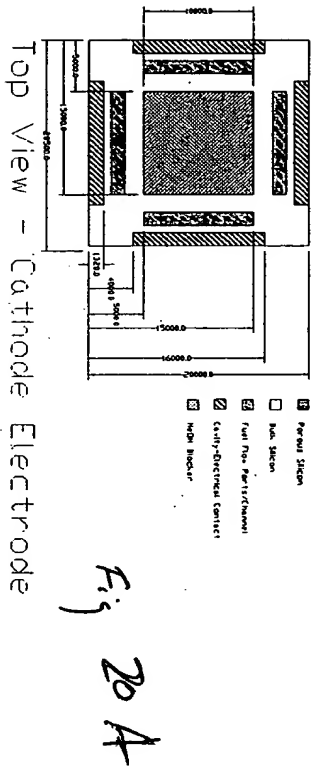


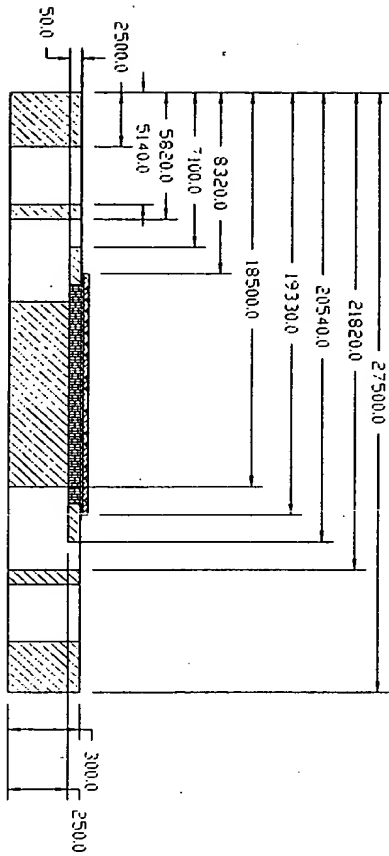
FIG. 1 - CATHODE ELECTRODE

FIG. 2 - DIMENSIONS ARE IN INCHES

FIG. 3 - DIMENSIONS ARE IN INCHES

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MEH10 - CATHODE ELECTRODE



21





-  Silicon Substrate
-  Porous Silicon
-  Pd Layer
-  Fuel Flow Ports/Channel

Fig 21

NOTE: Dimensions are in microns with ± 5 micron tolerances.

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Fig 21

Cathode Electrode

T05T50" 22E95860

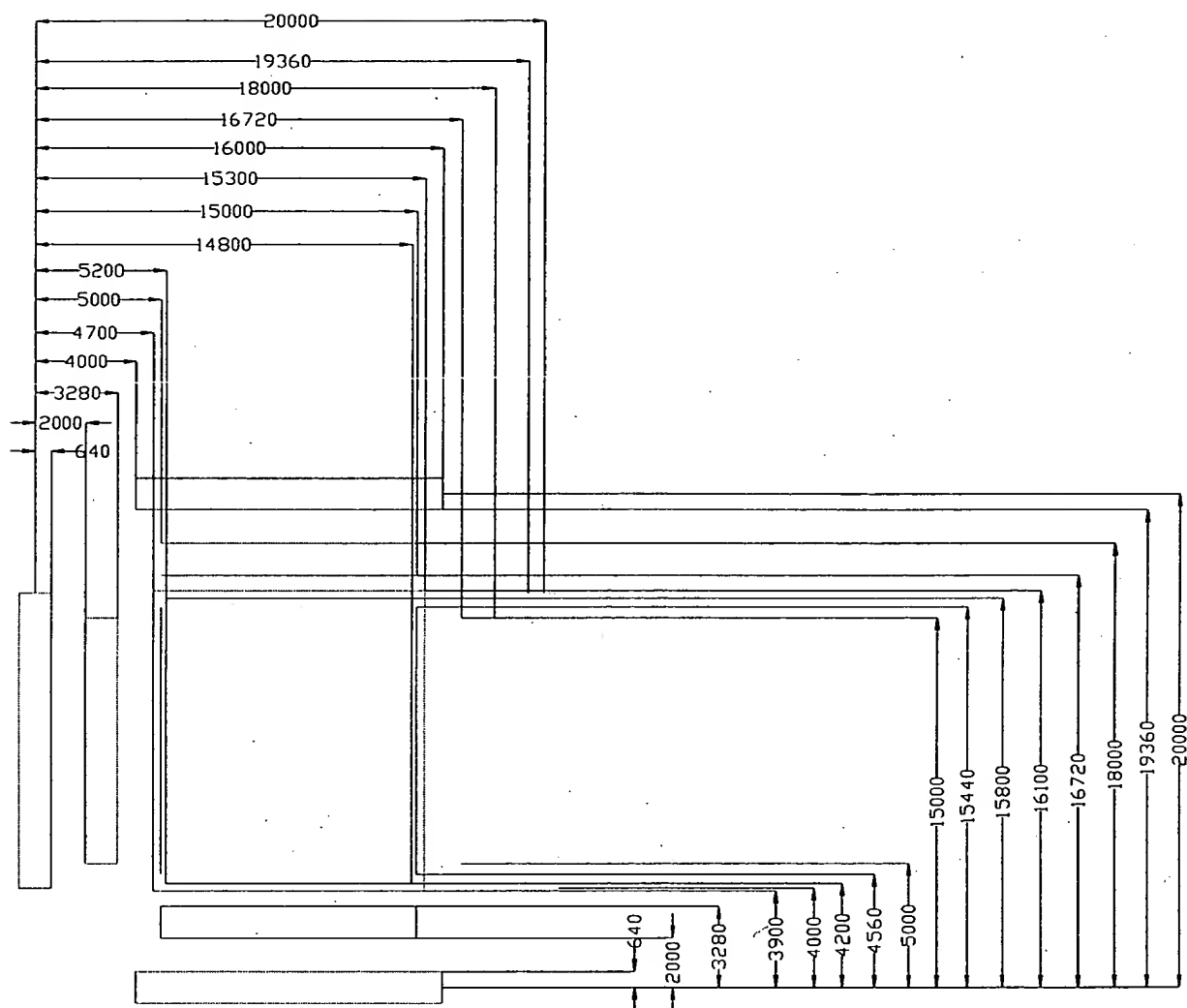
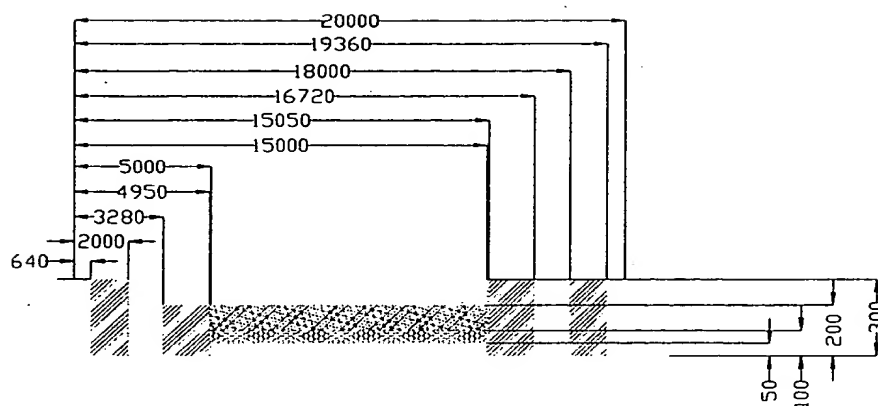







Fig 22A

Top View [X,Y] x1 scale



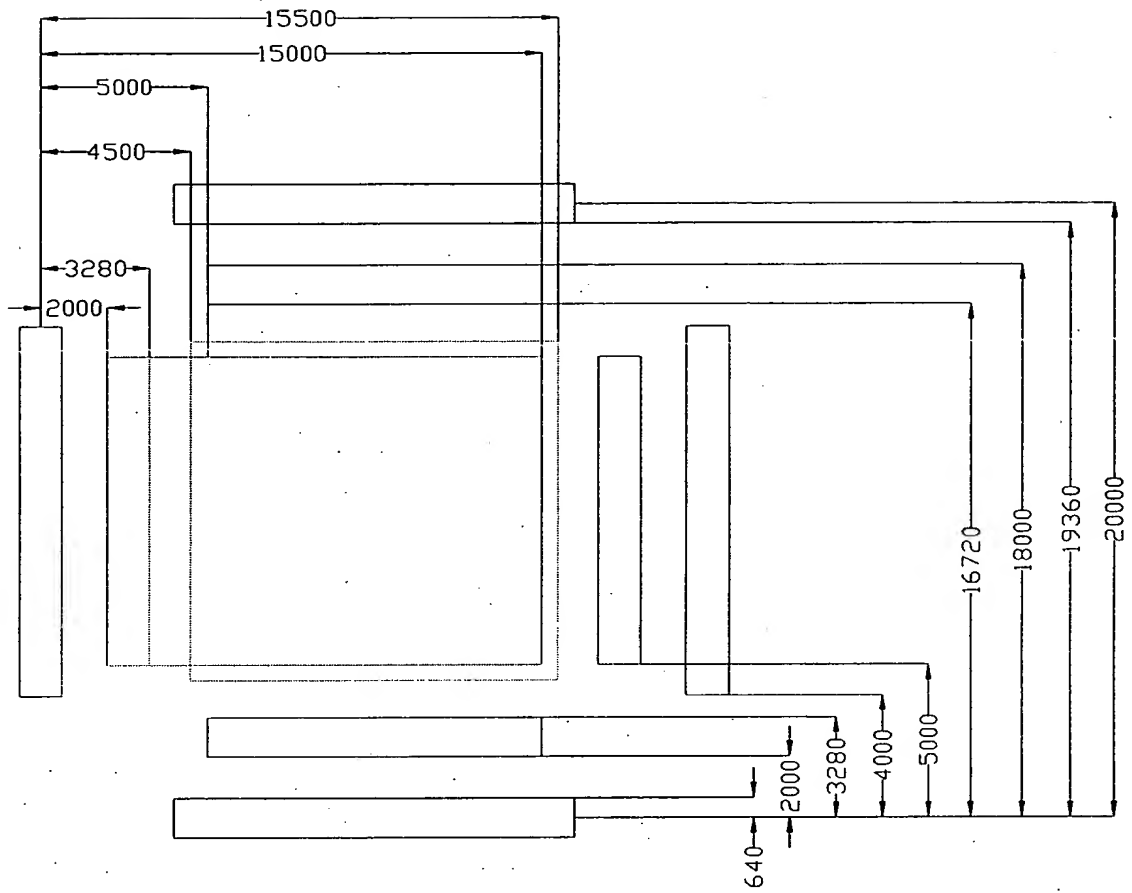
-  Perovskite Silicon
-  Bulk Silicon
-  Sol-gel
-  SiO₂ 5000 Angstroms on bottom side
-  Au/TiW 2.05 Microns on Top and Bottom side

Side View

Fig. 22B

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Anode Electrode

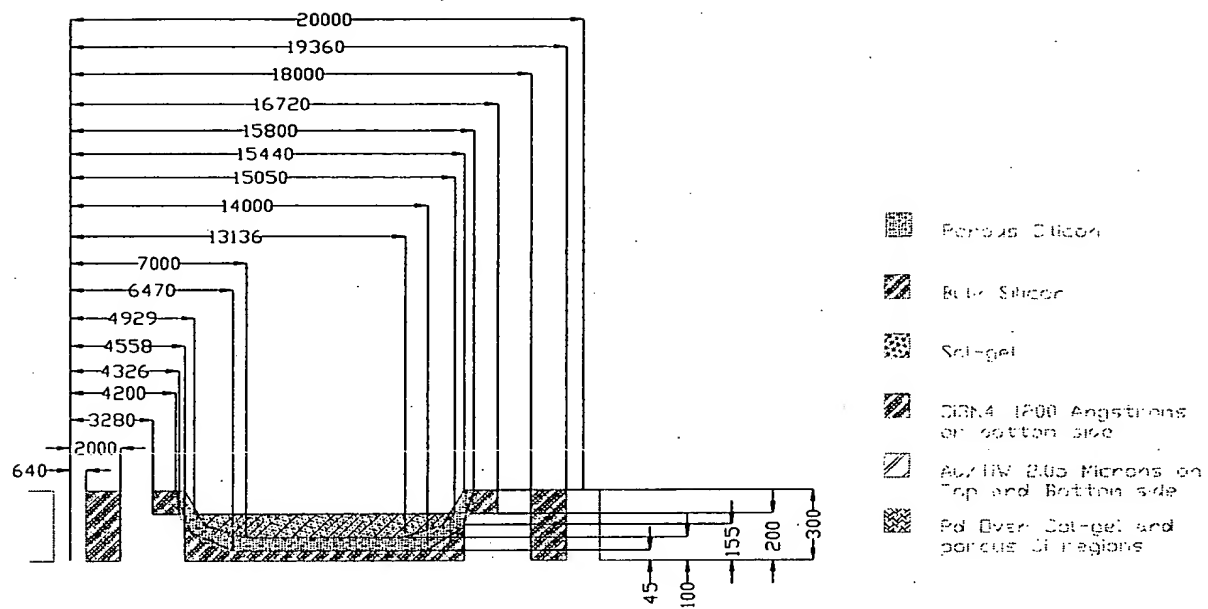


Top View [X,Y] x scale

Fig- 22C

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Side View

Fig. 22D

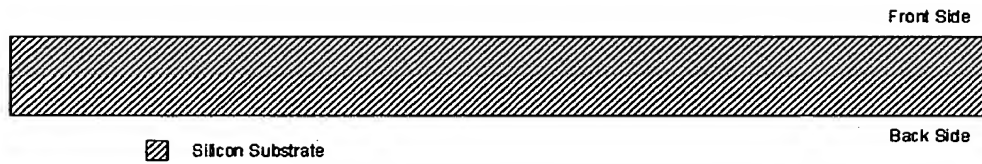


Figure 23

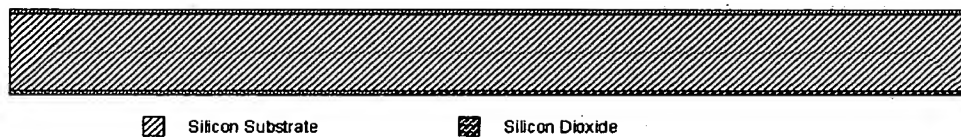


Figure 24

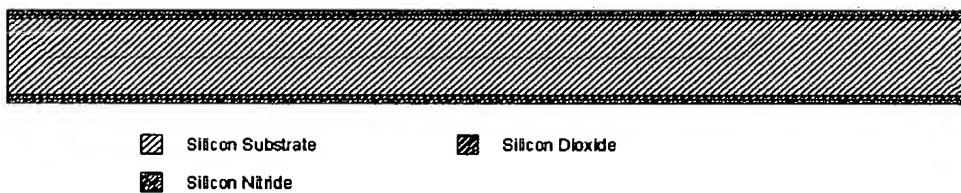


Figure 25

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09858327-051501

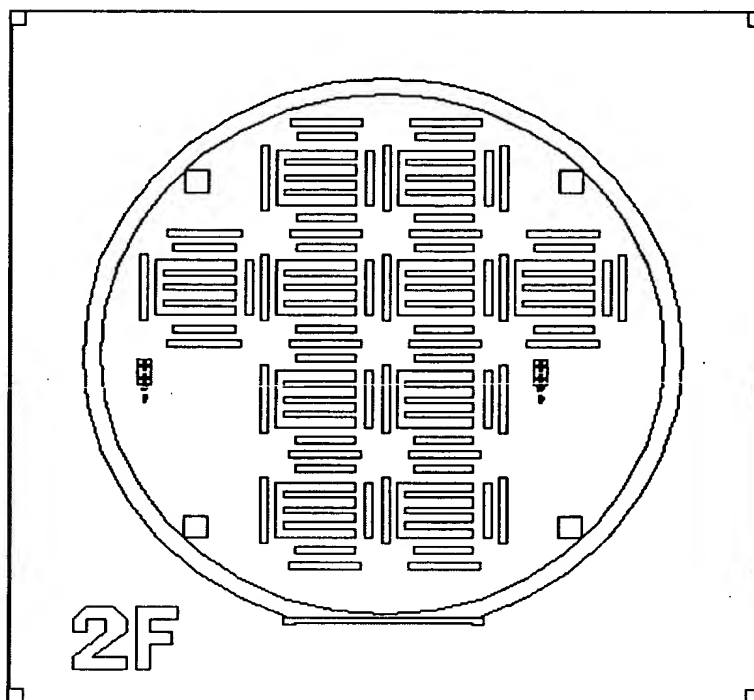
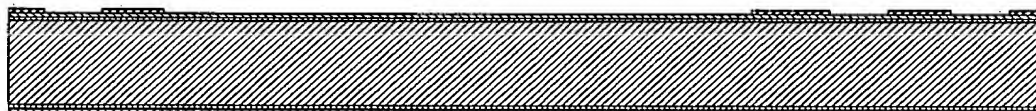


Figure 26A



- | | |
|---|---|
|  Silicon Substrate |  Photoresist |
|  Silicon Nitride |  Silicon Dioxide |

Figure 26B

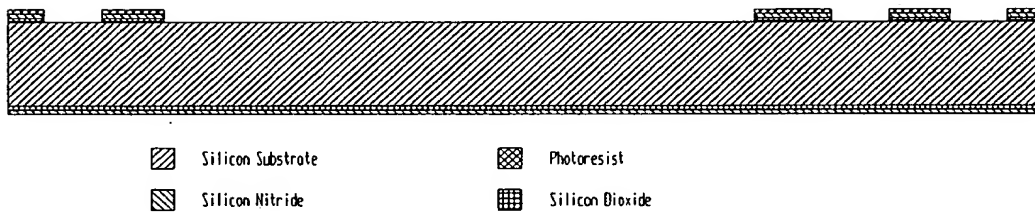


Figure 27

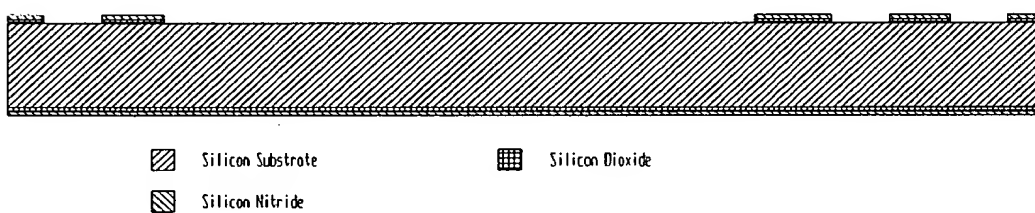


Figure 28

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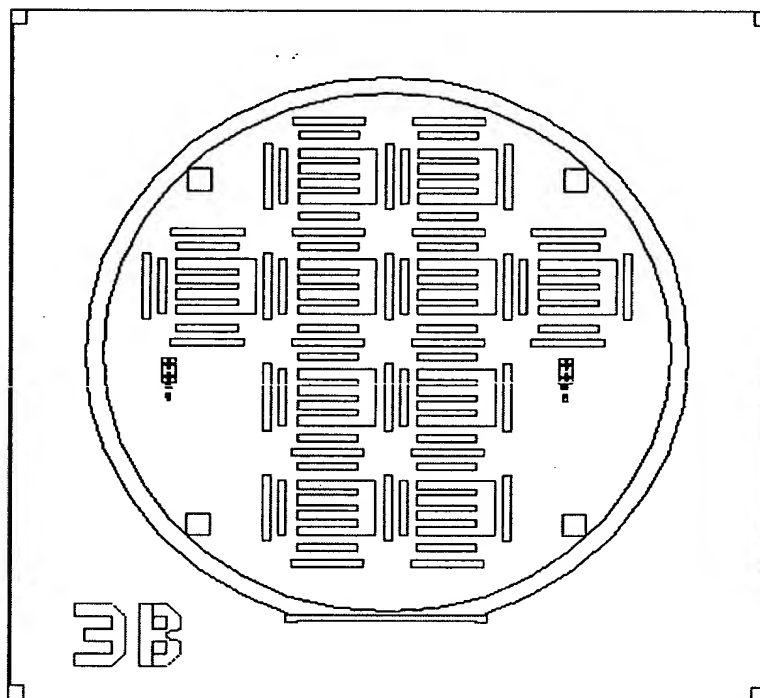
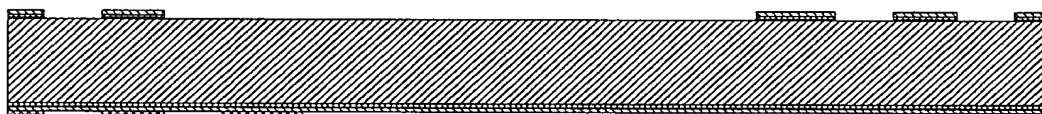


Figure 29A



- | | |
|---|---|
|  Silicon Substrate |  Silicon Dioxide |
|  Silicon Nitride |  Photoresist |

Figure 29B

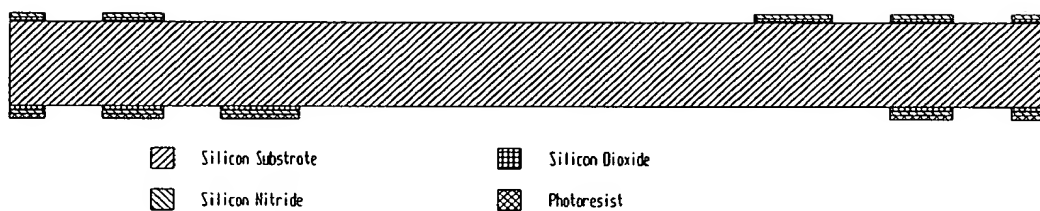


Figure 30

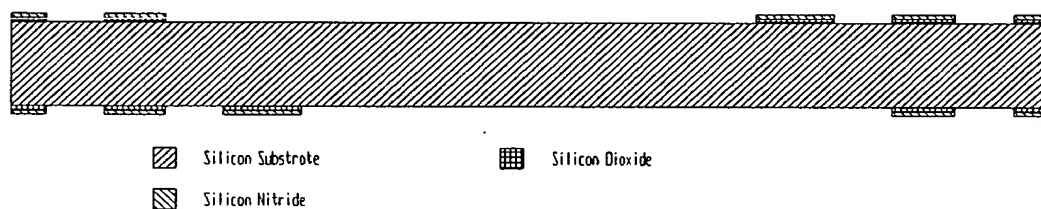


Figure 31

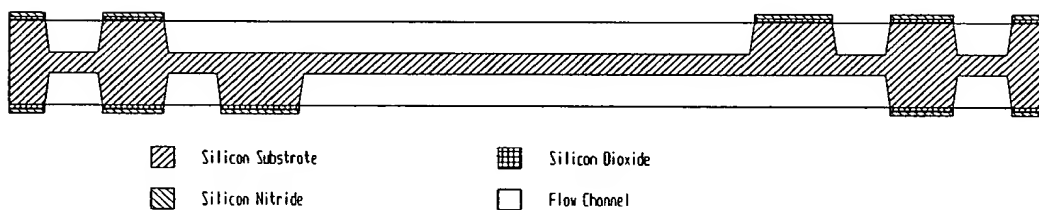


Figure 32

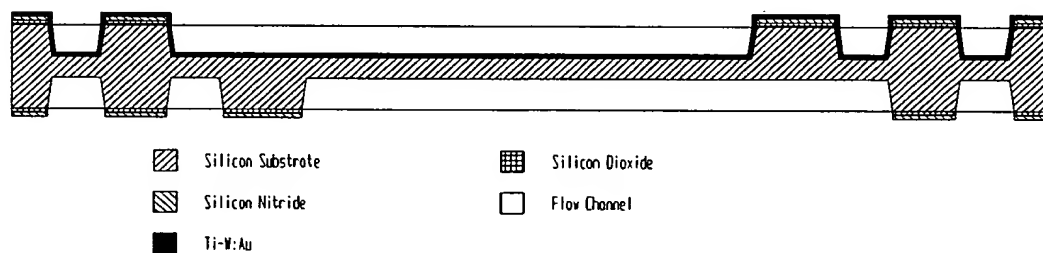


Figure 33

09058327.051501

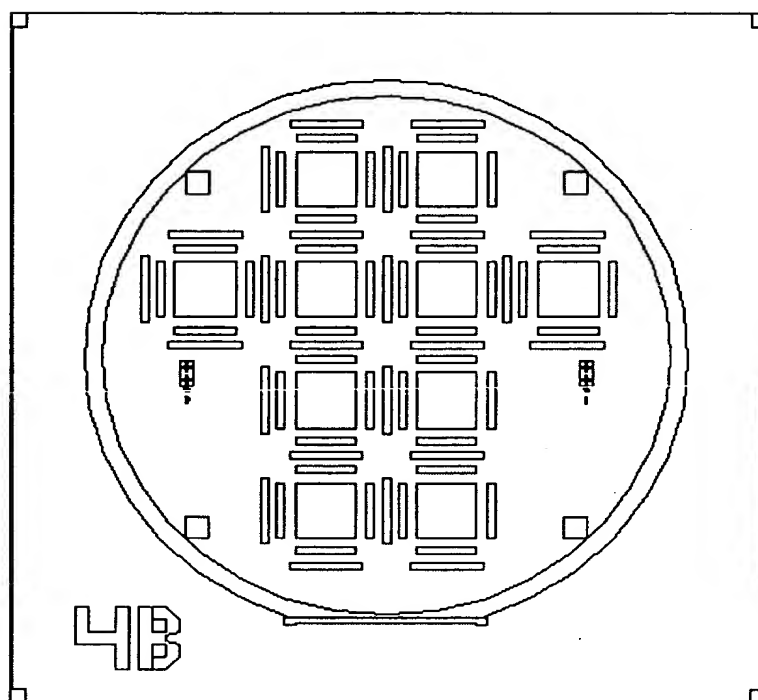


Figure 34A

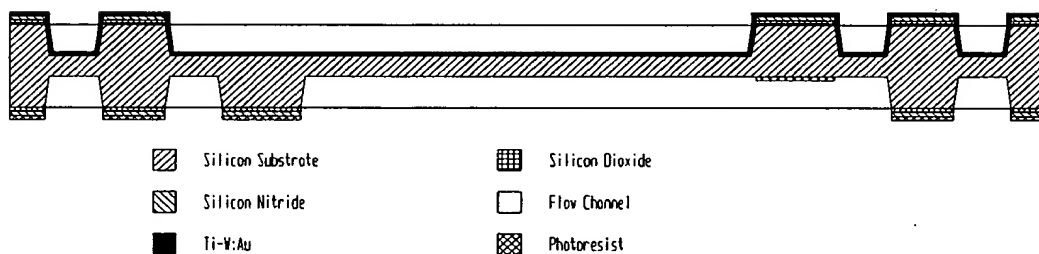


Figure 34B

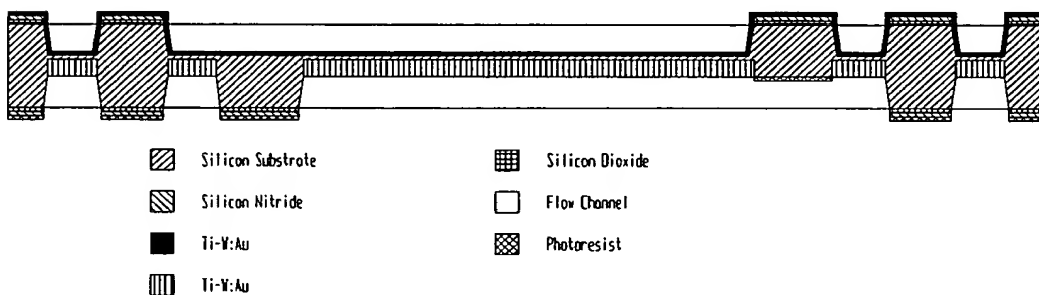


Figure 35

09858327.051504

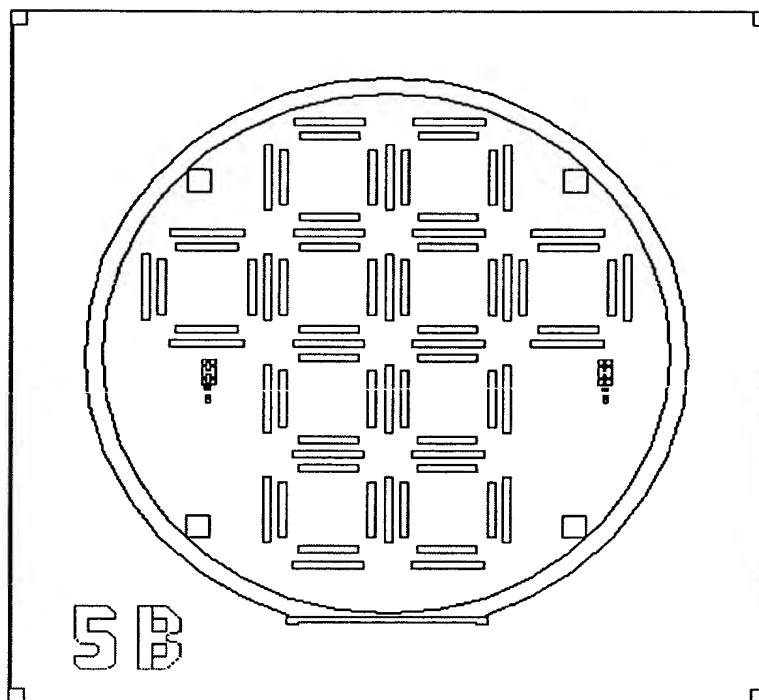
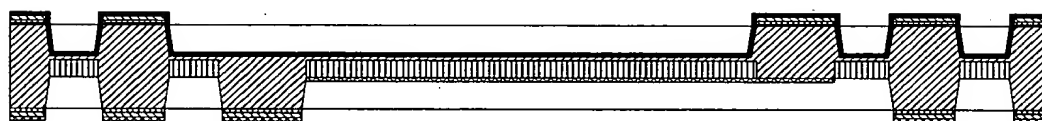


Figure 36A










- | | |
|---|---|
|  Silicon Substrate |  Silicon Dioxide |
|  Silicon Nitride |  Flow Channel |
|  Ti-W: Au |  Photoresist |
|  Ti-W: Au | |

Figure 36B

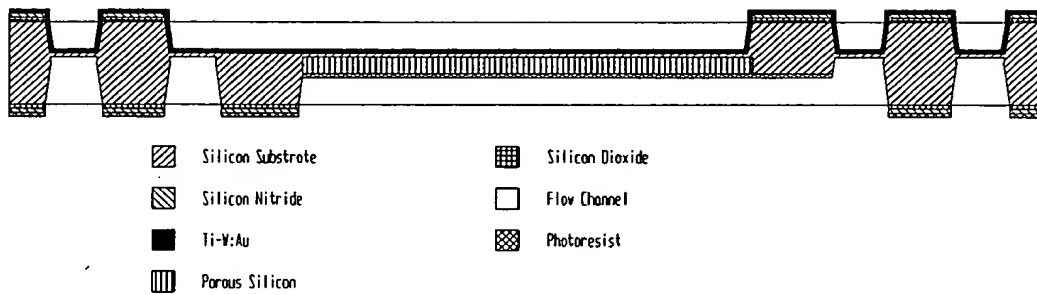


Figure 37

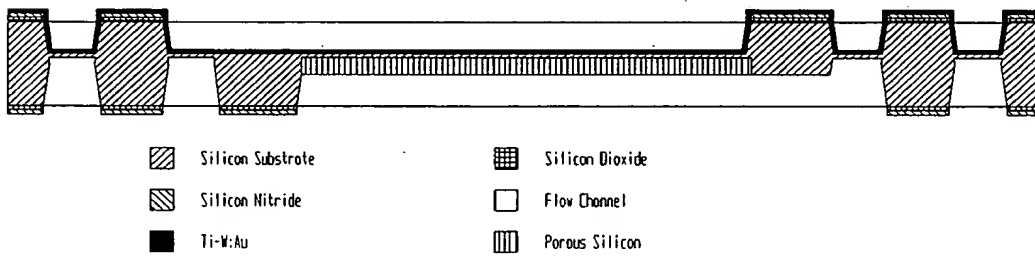


Figure 38

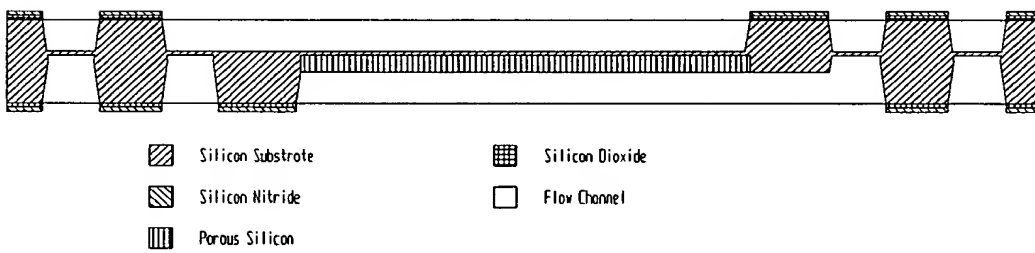


Figure 39

09858327-051501

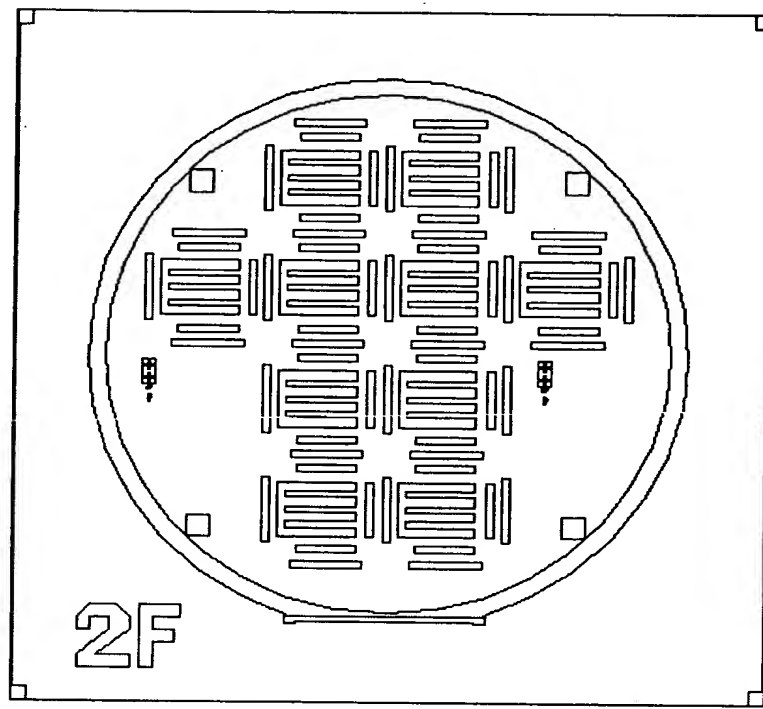


Figure 40A

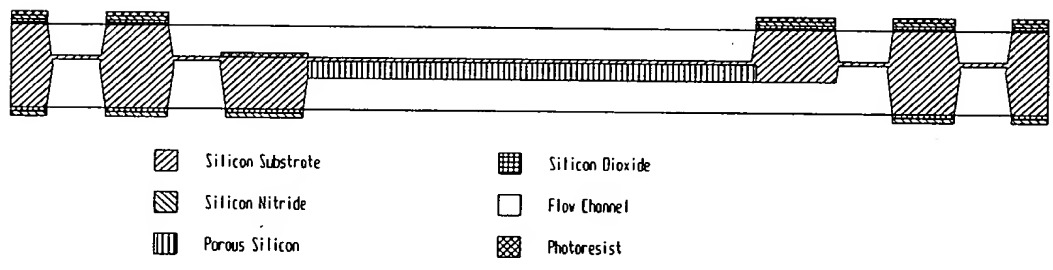


Figure 40B

09858327 051501

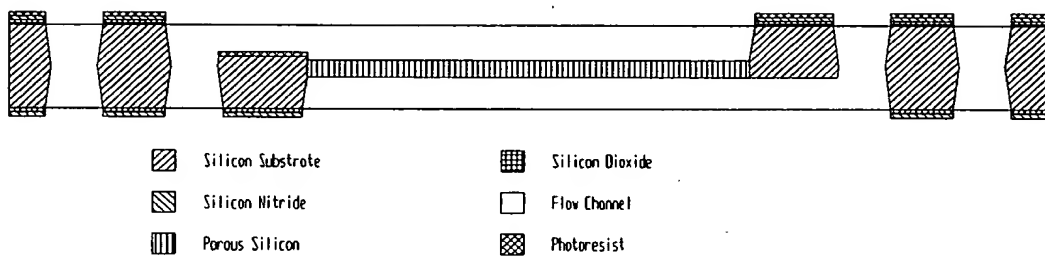


Figure 41

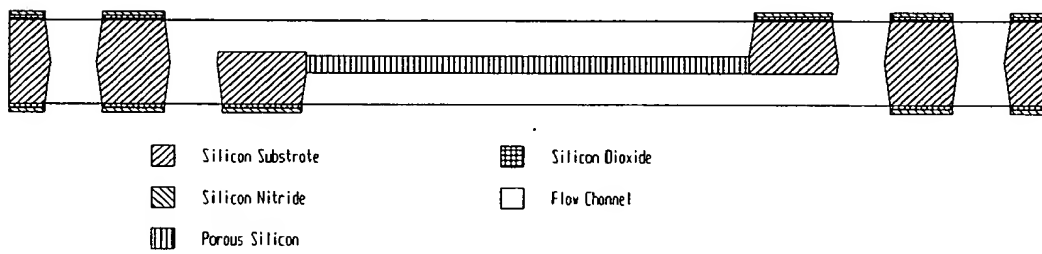


Figure 42

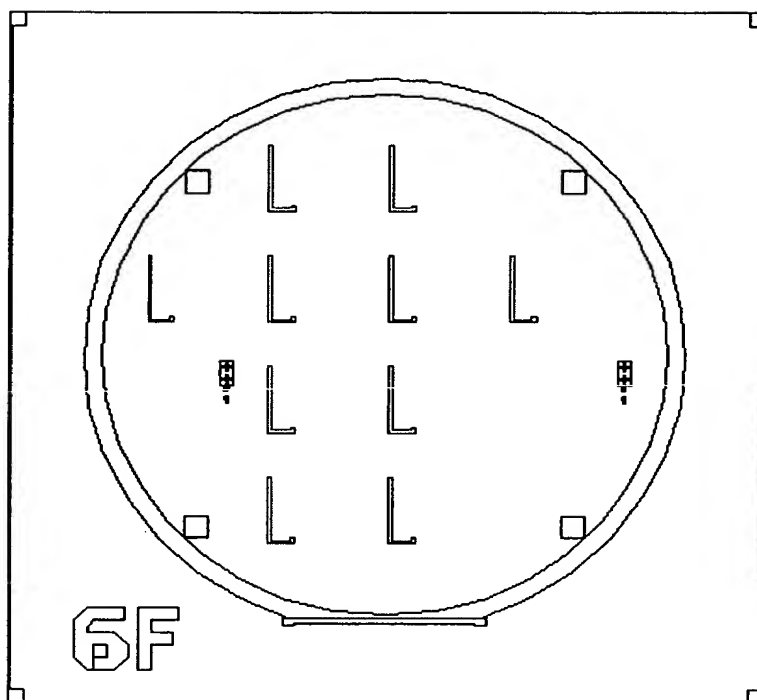


Figure 43A

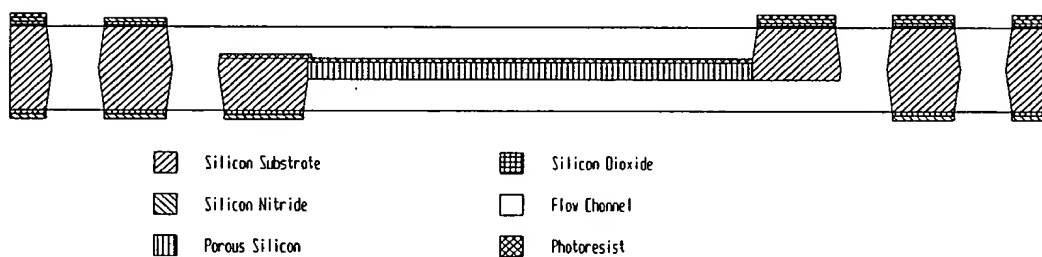


Figure 43B

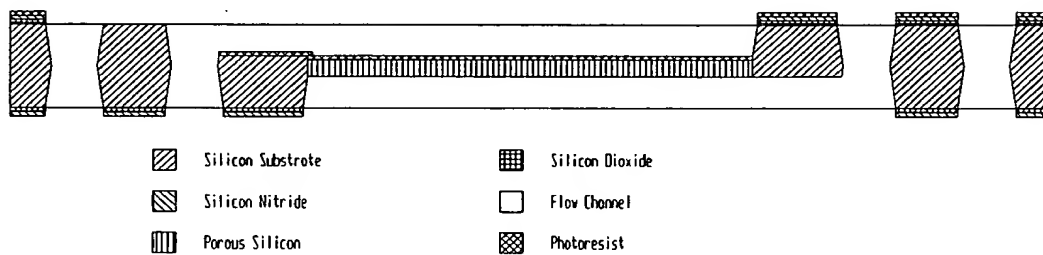


Figure 44

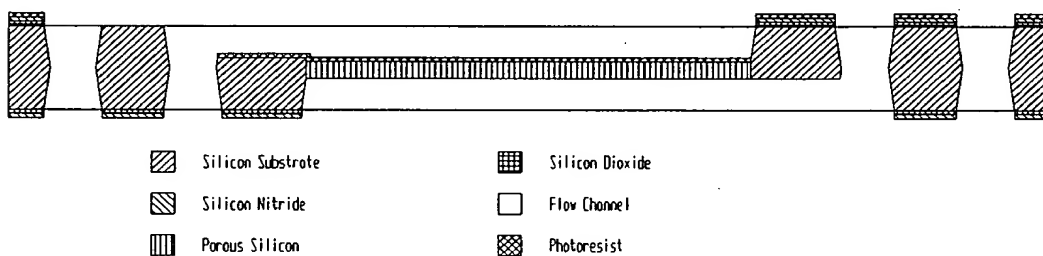


Figure 45

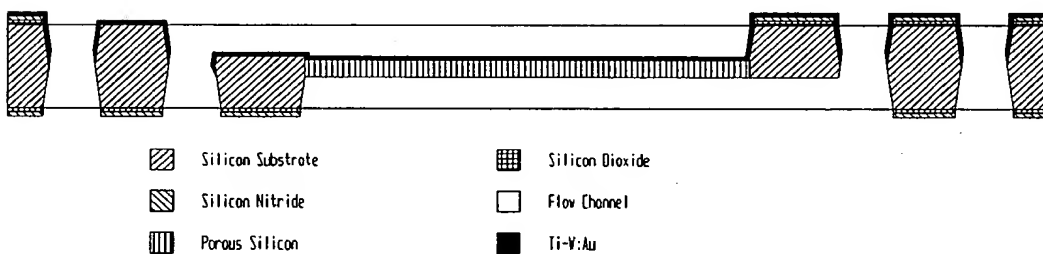


Figure 46

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09858327-051501

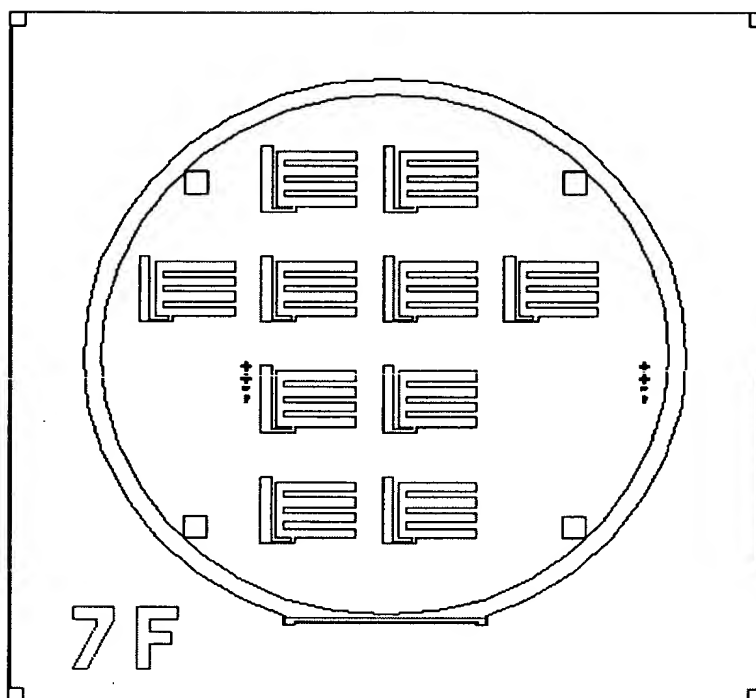
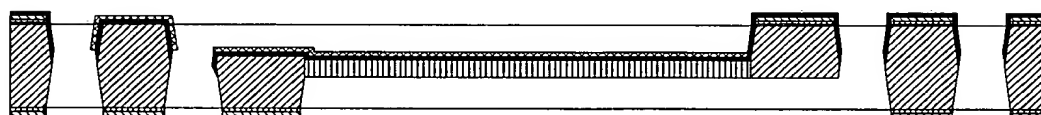


Figure 47A



- | | |
|-------------------|-----------------|
| Silicon Substrate | Silicon Dioxide |
| Silicon Nitride | Flow Channel |
| Porous Silicon | Ti-V: Au |
| Photoresist | |

Figure 47B

09858327-051501

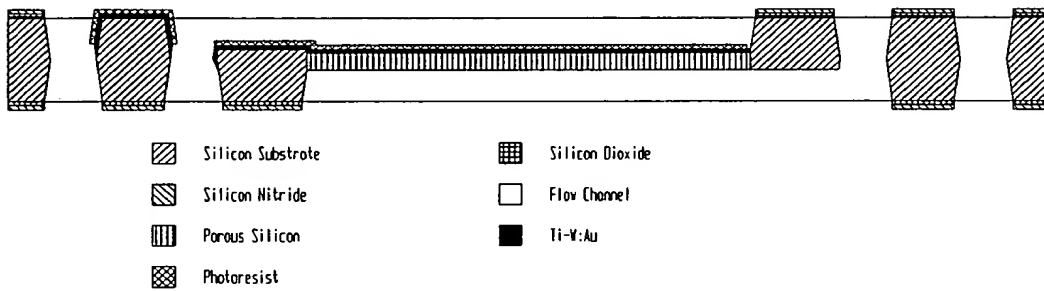


Figure 48

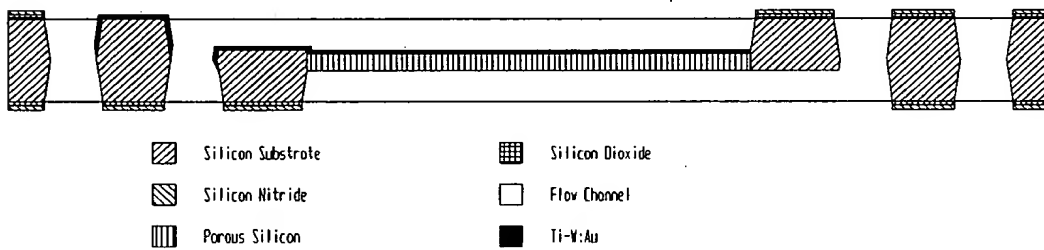


Figure 49

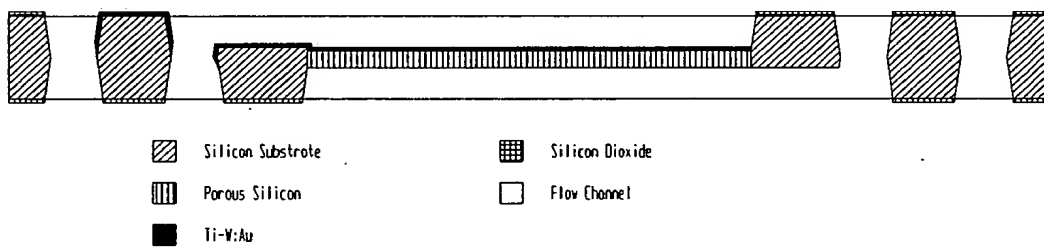


Figure 50

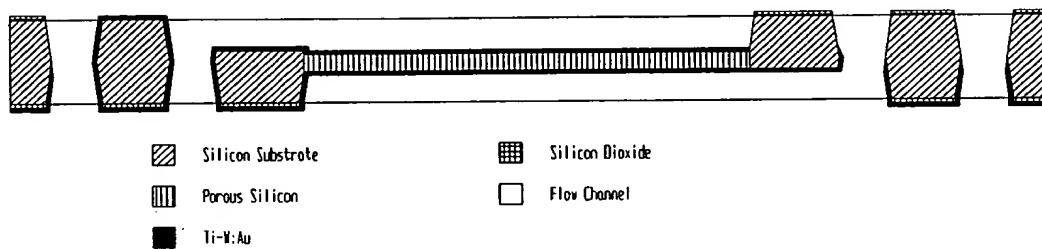


Figure 51

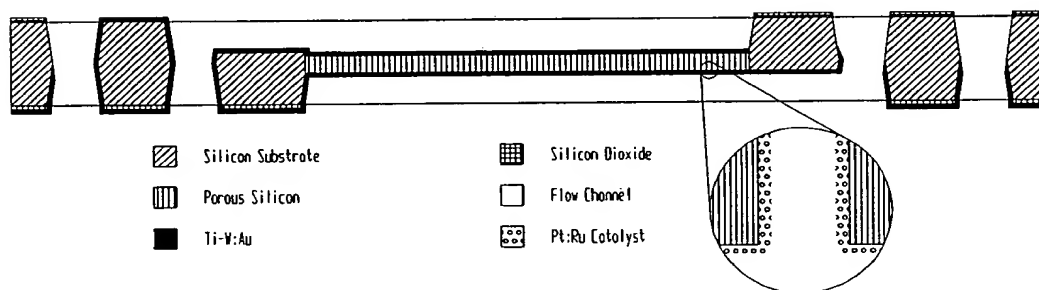


Figure 52

09858327.051501

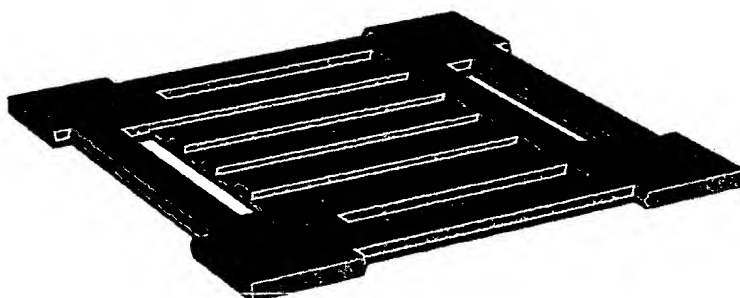


Figure S3A

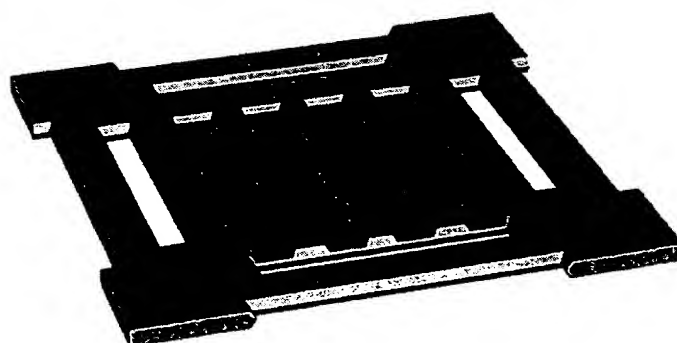
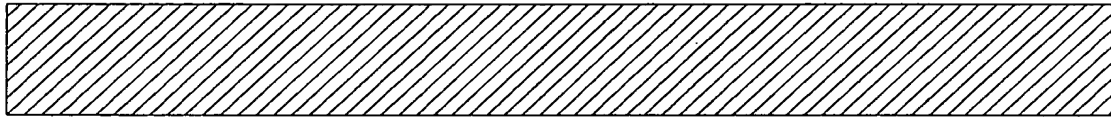


Figure S3B

09858327-051501




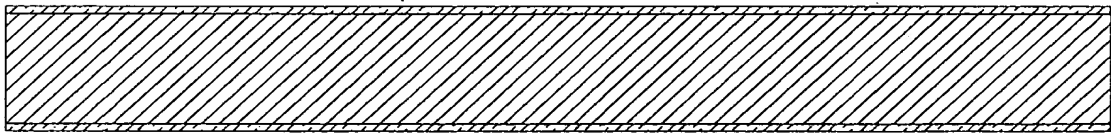

 Silicon Substrate

Figure 54



 Silicon Substrate

 Silicon Nitride

Figure 55

09858327-051501

0055327 051501

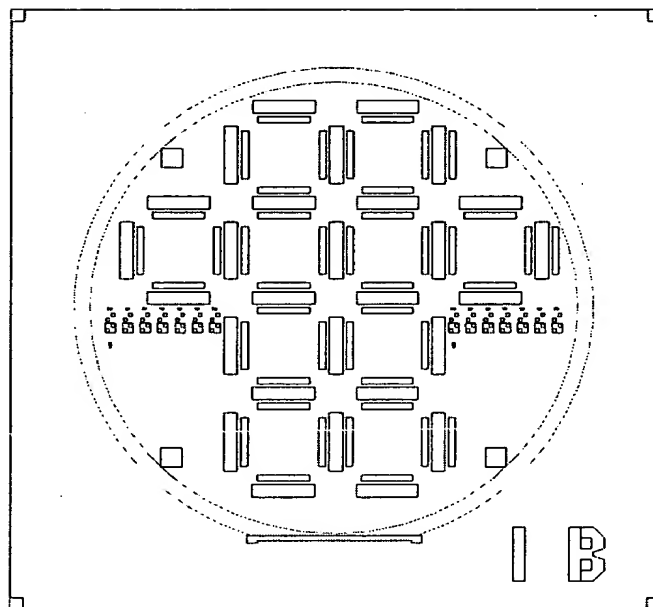
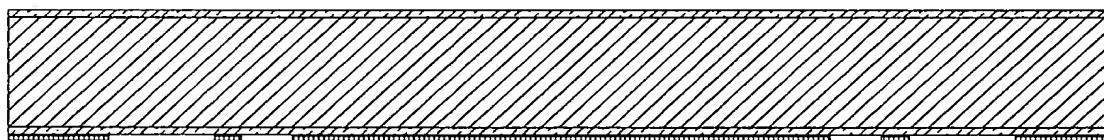


Figure 56A






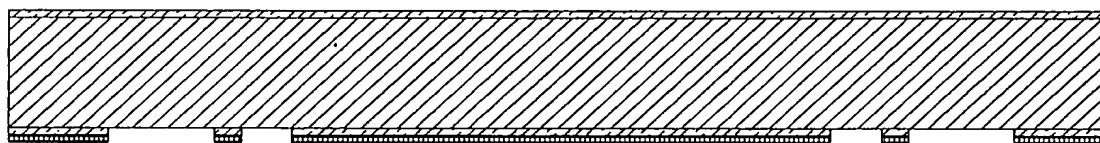

-  Silicon Substrate
-  Silicon Nitride
-  Photo Resists

Figure 56B

09858327-051501



 Silicon Substrate

 Silicon Nitride


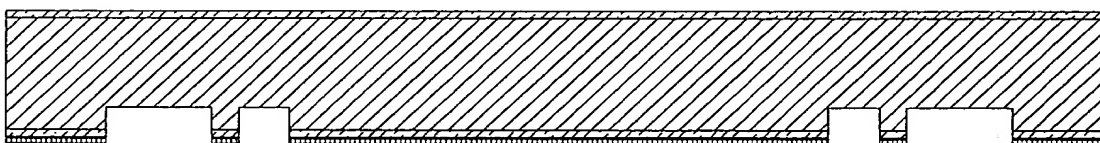

 Photo Resists

Figure 57



 Silicon Substrate

 Silicon Nitride


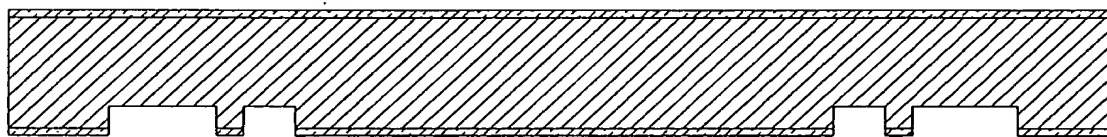
 Photo Resists

Figure 58

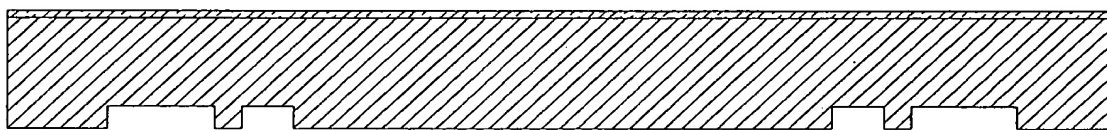
09858327-051501
TOSTED 22085860



□ Silicon Substrate

▨ Silicon Nitride

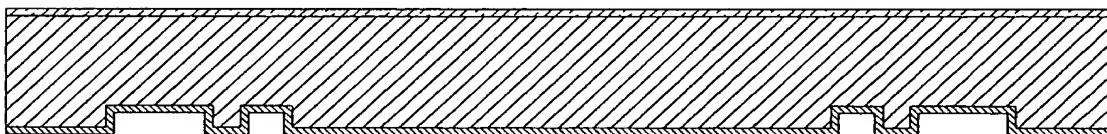
Figure 59



□ Silicon Substrate

▨ Silicon Nitride

Figure 60



□ Silicon Substrate

▨ Silicon Nitride

▩ Aluminum Contact

Figure 61

09858327-051501
TOSTSD / 2E85860

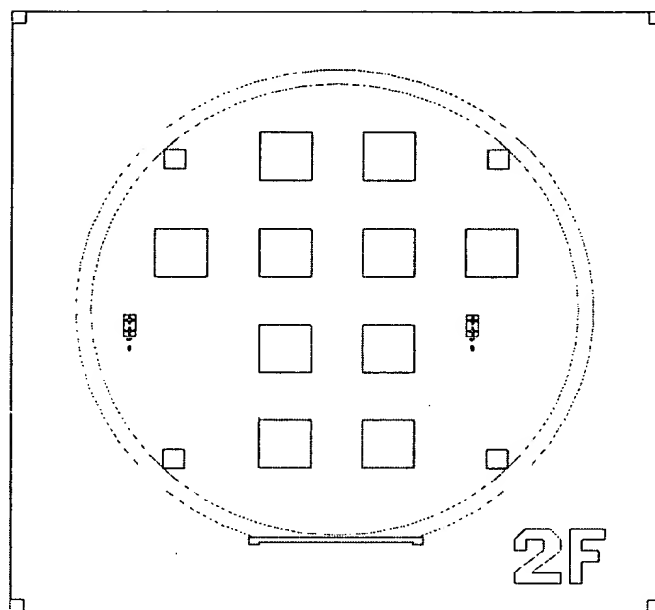
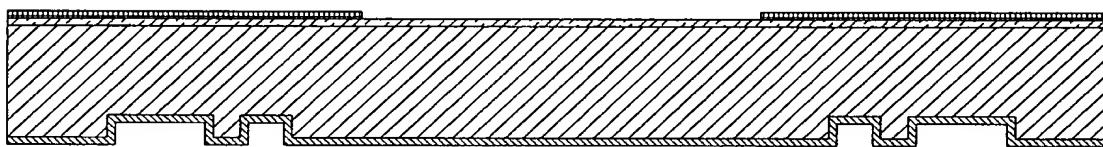


Figure 62A







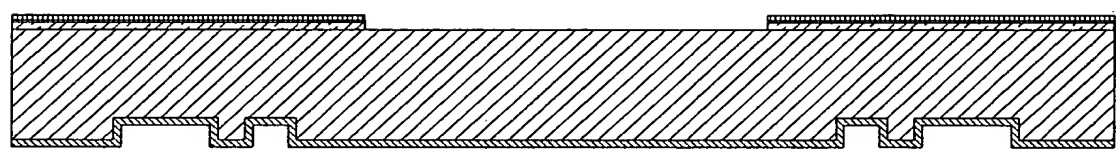
- | | |
|---|---|
|  Silicon Substrate |  Photo Resists |
|  Silicon Nitride | |
|  Aluminum Contact | |

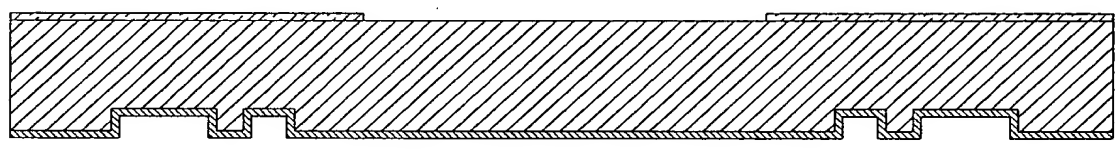
Figure 62B

09858327-051501



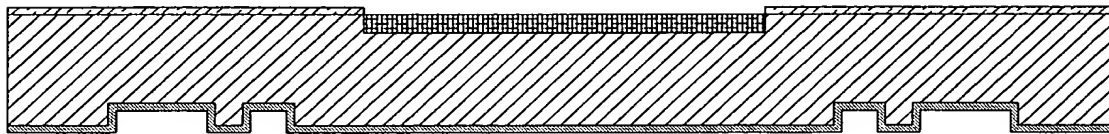
- Silicon Substrate
- Photo Resists
- Silicon Nitride
- Aluminum Contact

Figure 63



- Silicon Substrate
- Silicon Nitride
- Aluminum Contact

Figure 64







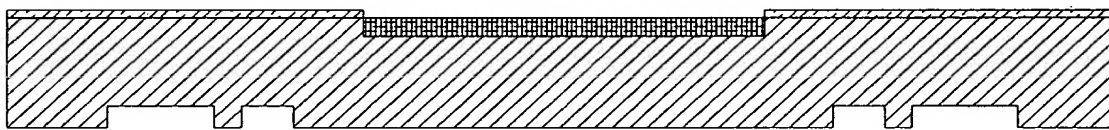
- | | | | |
|---|-------------------|---|----------------|
|  | Silicon Substrate |  | Porous Silicon |
|  | Silicon Nitride | | |
|  | Aluminum Contact | | |

Figure 65






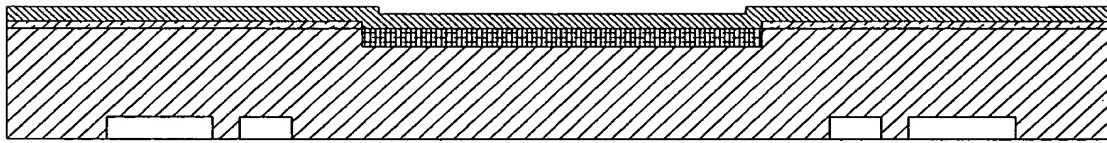
- | | | | |
|---|-------------------|---|----------------|
|  | Silicon Substrate |  | Porous Silicon |
|  | Silicon Nitride | | |

Figure 66





- | | |
|---|--|
|  Silicon Substrate |  Aluminum Contact |
|  Silicon Nitride |  Porous Silicon |

Figure 67

09858327-051501

09858327 051501

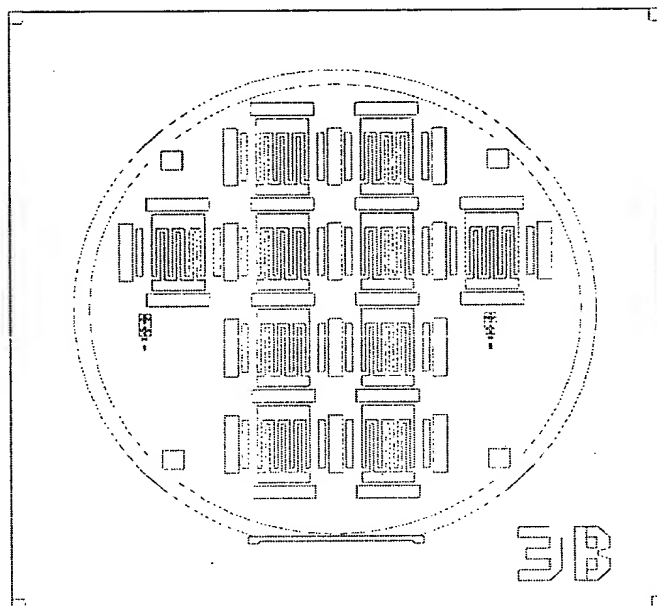
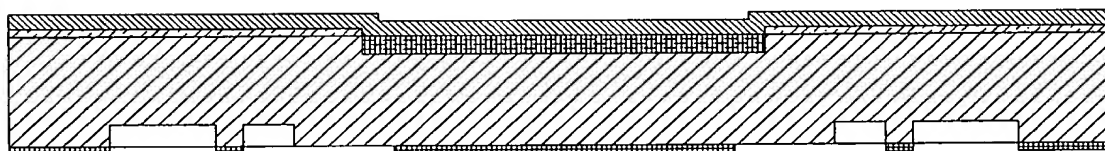


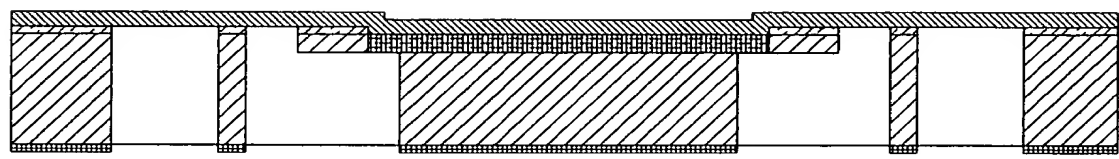
Figure 68A



- | | |
|---|--|
|  Silicon Substrate |  Aluminum Contact |
|  Silicon Nitride |  Porous Silicon |
|  Photo Resists | |

Figure 68B

09858327-054501







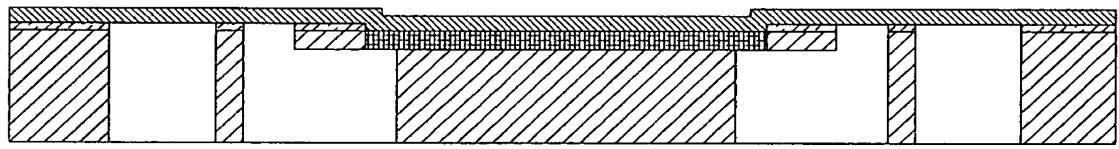
- | | |
|---|--|
|  Silicon Substrate |  Aluminum Contact |
|  Silicon Nitride |  Porous Silicon |
|  Photo Resists | |

Figure 6A







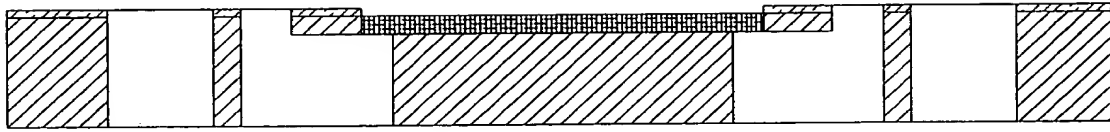
- | | |
|---|--|
|  Silicon Substrate |  Aluminum Contact |
|  Silicon Nitride |  Porous Silicon |

Figure 70






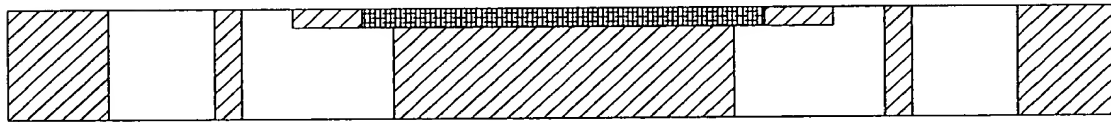
 Silicon Substrate  Porous Silicon
 Silicon Nitride

Figure 71





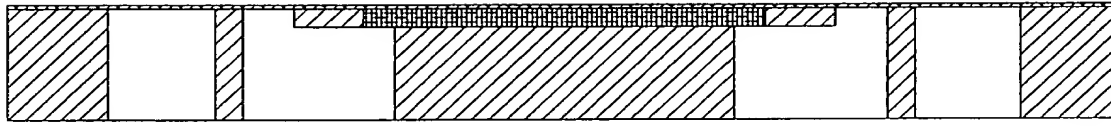
 Silicon Substrate
 Porous Silicon

Figure 72






-  Silicon Substrate
-  Porous Silicon
-  Metal Seed Layer

Figure 73

09858327-051501

105150" / 2285360

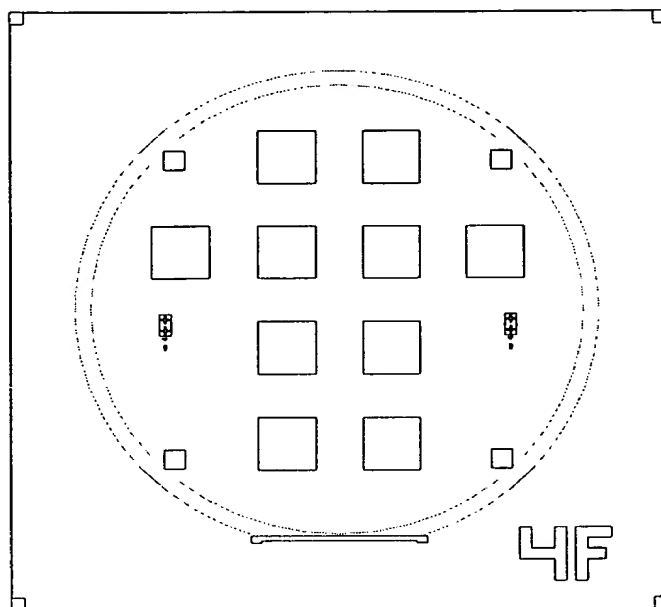
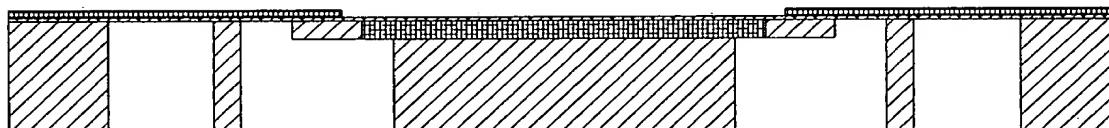


Figure 74A







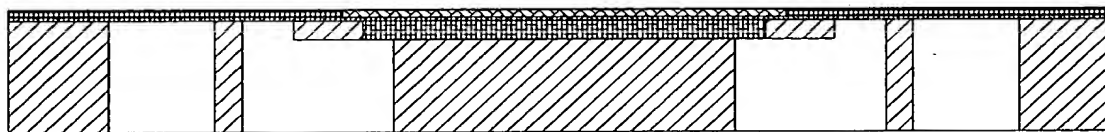
- | | |
|---|--|
|  Silicon Substrate |  Photo Resists |
|  Metal Seed Layer |  Porous Silicon |

Figure 74B







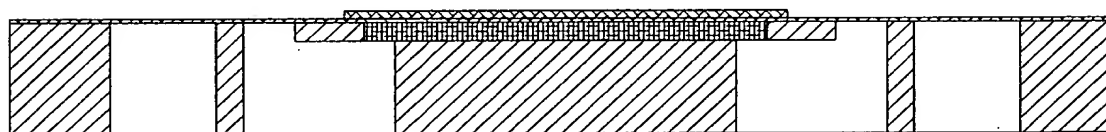
- | | |
|---|--|
|  Silicon Substrate |  Photo Resists |
|  Pd Layer |  Porous Silicon |

Figure 75






- | | |
|---|--|
|  Silicon Substrate |  Porous Silicon |
|  Pd Layer | |

Figure 76

09858327-051501

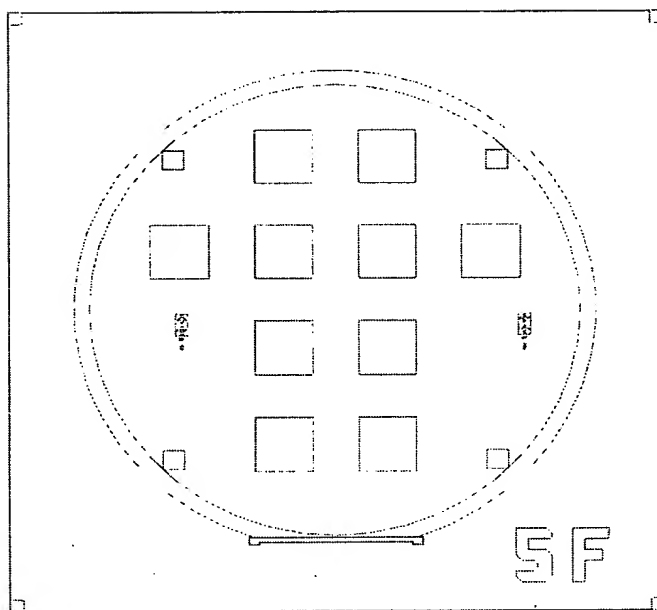
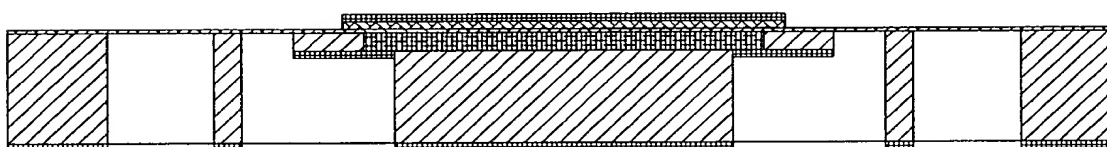


Figure 77A







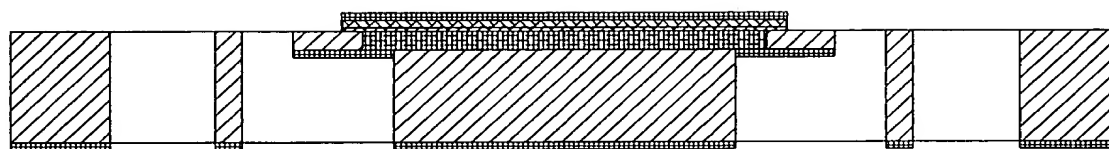
- | | |
|---|--|
|  Silicon Substrate |  Porous Silicon |
|  Pd Layer |  Photo Resists |

Figure 77B

0985327-051501



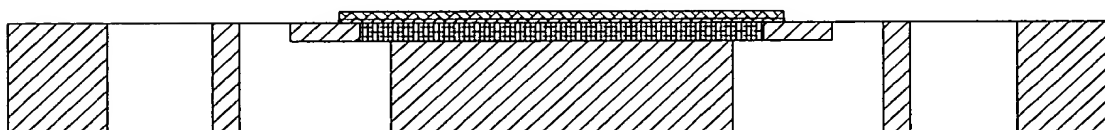
▨ Silicon Substrate

▩ Porous Silicon

▧ Pd Layer

▩ Photo Resists

Figure 78



▨ Silicon Substrate

▩ Porous Silicon

▧ Pd Layer

Figure 79

09858327-051501
TOSTSO 2285860

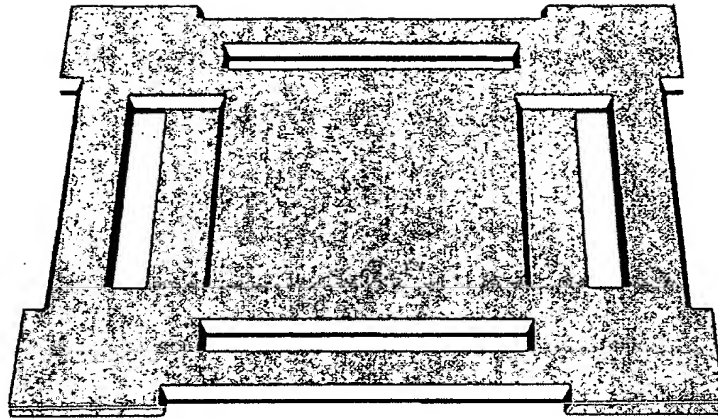


Fig. 80A

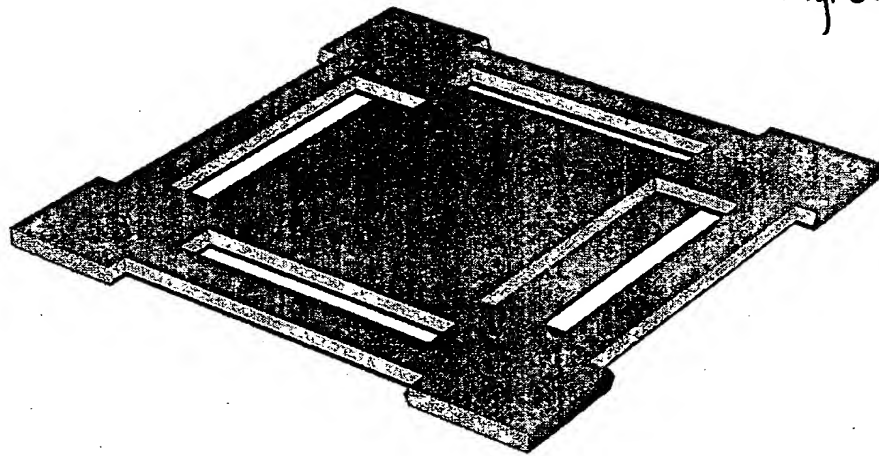


Fig. 80B

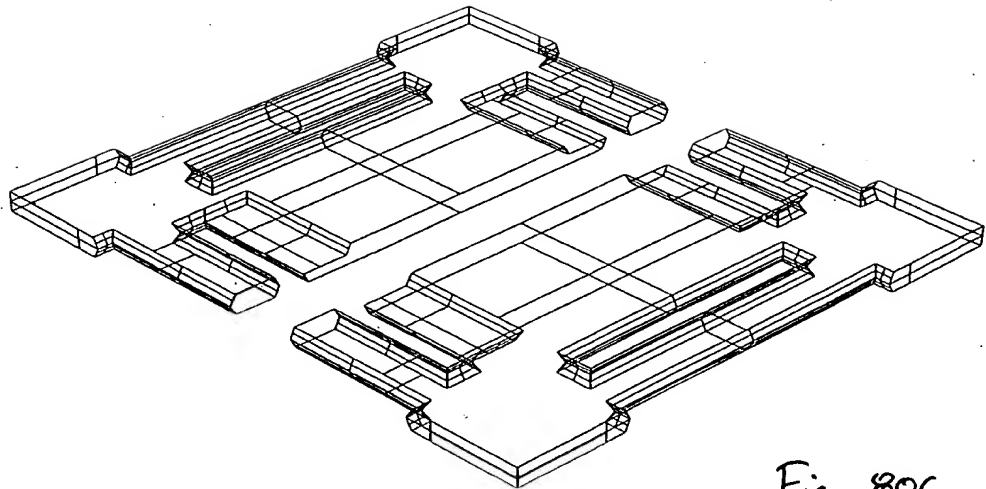
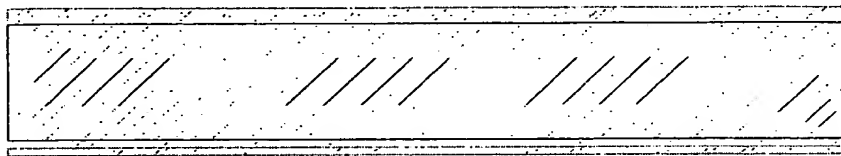


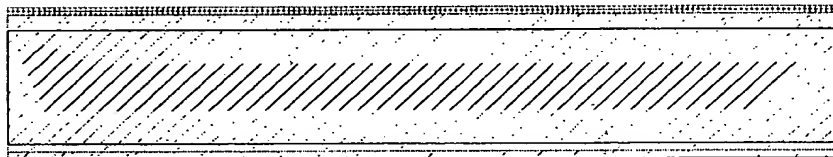
Fig. 80C

09858327-051501



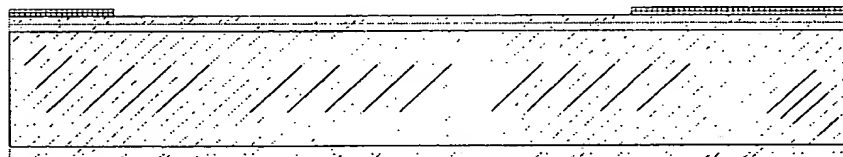
- | | |
|---|---|
| <input type="checkbox"/> Silicon Oxide | <input checked="" type="checkbox"/> Silicon Nitride |
| <input checked="" type="checkbox"/> Silicon Substrate | |

Fig. __ 81



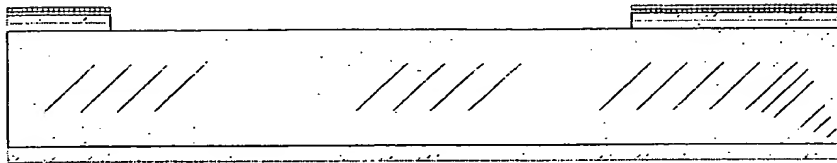
- | | |
|---|---|
| <input type="checkbox"/> Silicon Oxide | <input type="checkbox"/> Silicon Nitride |
| <input checked="" type="checkbox"/> Silicon Substrate | <input checked="" type="checkbox"/> Photoresist |

Fig. __ 82



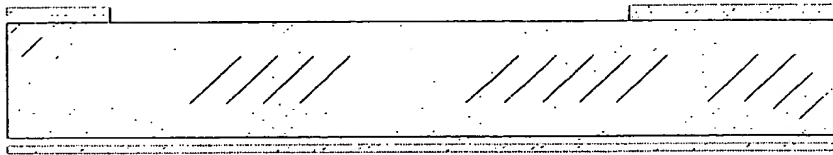
- | | |
|---|---|
| <input type="checkbox"/> Silicon Oxide | <input checked="" type="checkbox"/> Silicon Nitride |
| <input checked="" type="checkbox"/> Silicon Substrate | <input checked="" type="checkbox"/> Photoresist |

Fig. __ 83



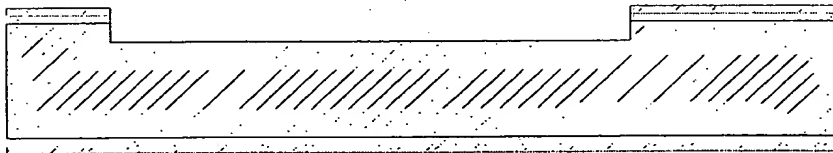
- | | |
|--|--|
| <input type="checkbox"/> Silicon Oxide | <input type="checkbox"/> Silicon Nitride |
| <input type="checkbox"/> Silicon Substrate | <input type="checkbox"/> Photoresist |

Fig. 84



- | | |
|--|--|
| <input type="checkbox"/> Silicon Oxide | <input type="checkbox"/> Silicon Nitride |
| <input type="checkbox"/> Silicon Substrate | |

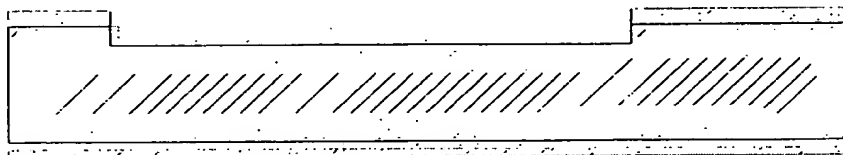
Fig. 85



- | | |
|--|--|
| <input type="checkbox"/> Silicon Oxide | <input type="checkbox"/> Silicon Nitride |
| <input type="checkbox"/> Silicon Substrate | |

Fig. 86

09858327-051501

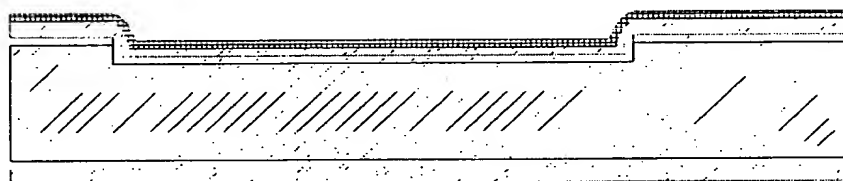


☐ Silicon Oxide

☐ Silicon Nitride

☐ Silicon Substrate

Fig. 87



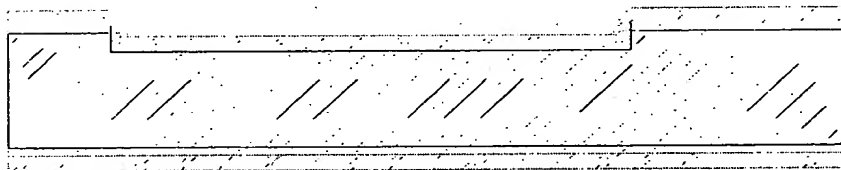
☐ Silicon Oxide

☐ Silicon Nitride

☐ Silicon Substrate

☒ Photoresist

Fig. 88



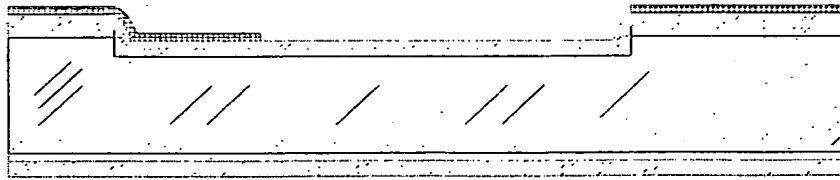
☐ Silicon Oxide

☐ Silicon Nitride

☐ Silicon Substrate

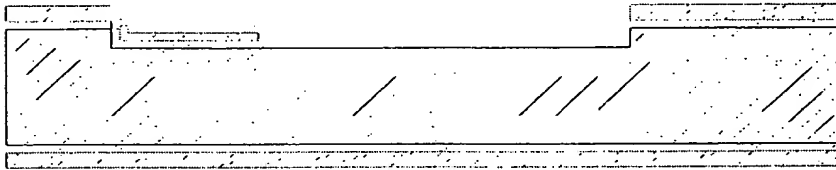
Fig. 89

09858327 051501



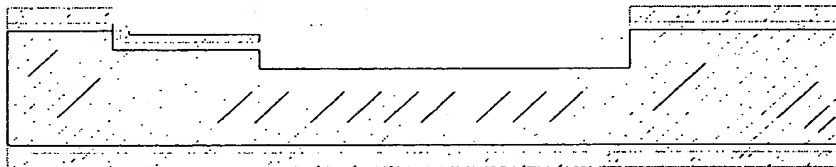
- | | |
|--|---|
| <input type="checkbox"/> Silicon Oxide | <input type="checkbox"/> Silicon Nitride |
| <input type="checkbox"/> Silicon Substrate | <input checked="" type="checkbox"/> Photoresist |

Fig. 90



- | | |
|---|--|
| <input type="checkbox"/> Silicon Oxide | <input type="checkbox"/> Silicon Nitride |
| <input checked="" type="checkbox"/> Silicon Substrate | |

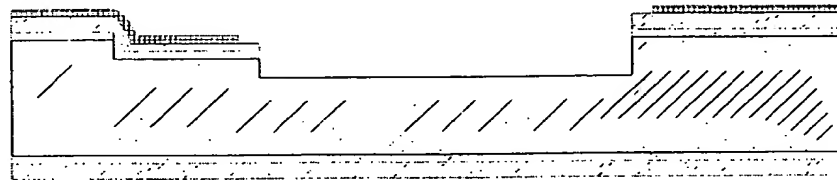
Fig. 91



- | | |
|---|--|
| <input type="checkbox"/> Silicon Oxide | <input type="checkbox"/> Silicon Nitride |
| <input checked="" type="checkbox"/> Silicon Substrate | |

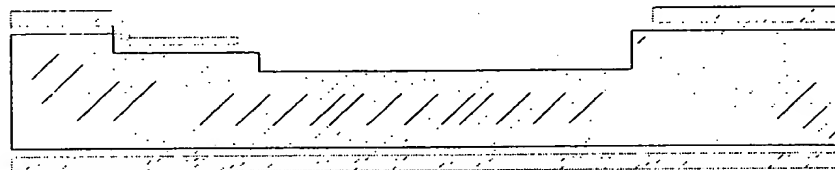
Fig. 92

09858327-051501



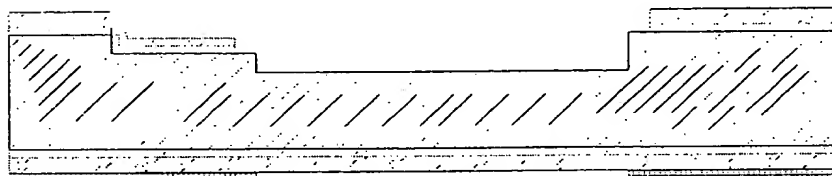
- | | |
|--|---|
| <input type="checkbox"/> Silicon Oxide | <input type="checkbox"/> Silicon Nitride |
| <input type="checkbox"/> Silicon Substrate | <input checked="" type="checkbox"/> Photoresist |

Fig. 93



- | | |
|--|---|
| <input type="checkbox"/> Silicon Oxide | <input checked="" type="checkbox"/> Silicon Nitride |
| <input type="checkbox"/> Silicon Substrate | |

Fig. 94

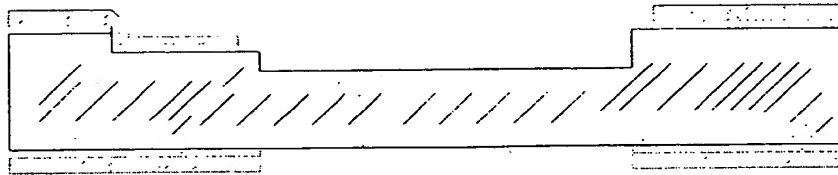


- | | |
|---|---|
| <input type="checkbox"/> Silicon Oxide | <input type="checkbox"/> Silicon Nitride |
| <input checked="" type="checkbox"/> Silicon Substrate | <input checked="" type="checkbox"/> Photoresist |

Fig. 95

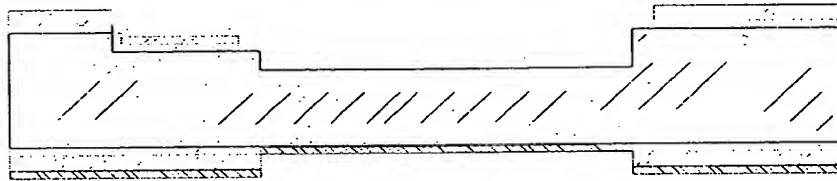
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09858327-051501



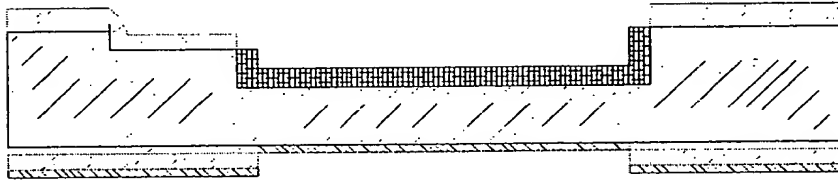
- | | |
|---|--|
| <input type="checkbox"/> Silicon Oxide | <input type="checkbox"/> Silicon Nitride |
| <input checked="" type="checkbox"/> Silicon Substrate | |

Fig. 96



- | | |
|---|--|
| <input type="checkbox"/> Silicon Oxide | <input type="checkbox"/> Silicon Nitride |
| <input checked="" type="checkbox"/> Silicon Substrate | <input checked="" type="checkbox"/> Aluminum |

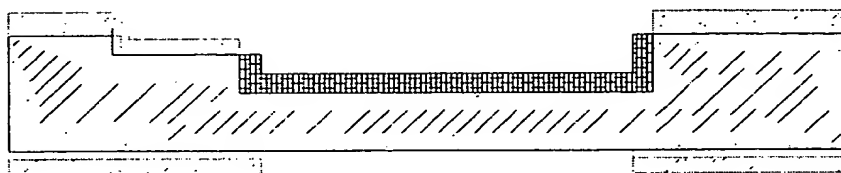
Fig. 97



- | | |
|---|--|
| <input type="checkbox"/> Silicon Oxide | <input type="checkbox"/> Silicon Nitride |
| <input checked="" type="checkbox"/> Silicon Substrate | <input checked="" type="checkbox"/> Aluminum |
| <input checked="" type="checkbox"/> Porous Silicon | |

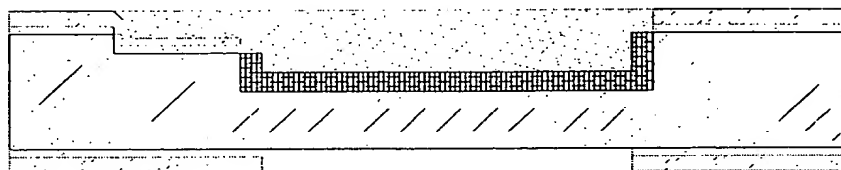
Fig. 98

09858327-051501



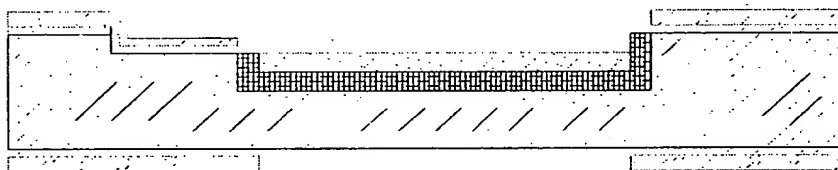
- | | |
|---|--|
| <input type="checkbox"/> Silicon Oxide | <input type="checkbox"/> Silicon Nitride |
| <input checked="" type="checkbox"/> Silicon Substrate | |
| <input checked="" type="checkbox"/> Porous Silicon | |

Fig. 99



- | | |
|---|--|
| <input type="checkbox"/> Silicon Oxide | <input type="checkbox"/> Silicon Nitride |
| <input checked="" type="checkbox"/> Silicon Substrate | <input type="checkbox"/> Sol-Gel |
| <input checked="" type="checkbox"/> Porous Silicon | |

Fig. 100



- | | |
|---|--|
| <input type="checkbox"/> Silicon Oxide | <input type="checkbox"/> Silicon Nitride |
| <input checked="" type="checkbox"/> Silicon Substrate | <input type="checkbox"/> Sol-Gel |
| <input checked="" type="checkbox"/> Porous Silicon | |

Fig. 101

0985327-051501

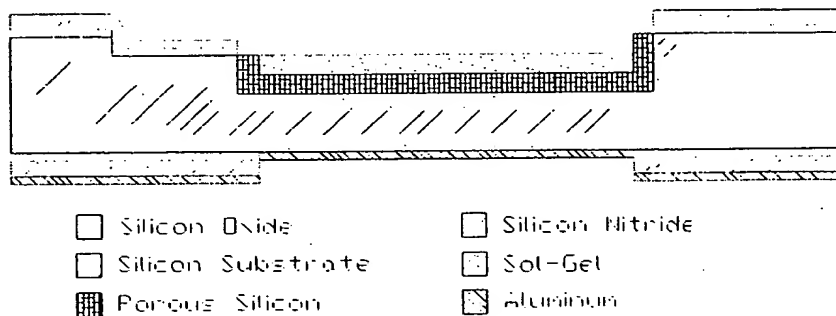


Fig. 102

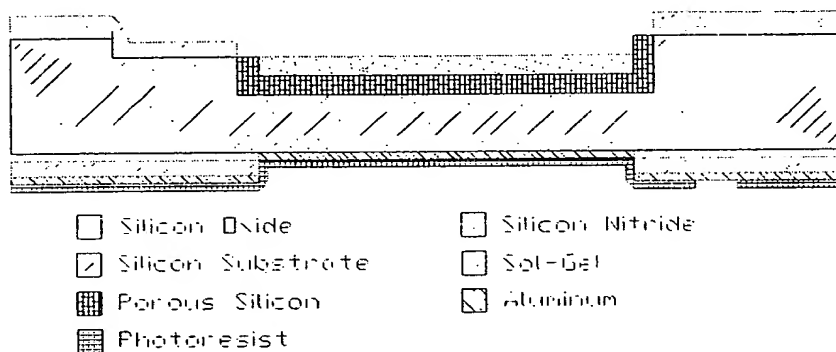


Fig. 103

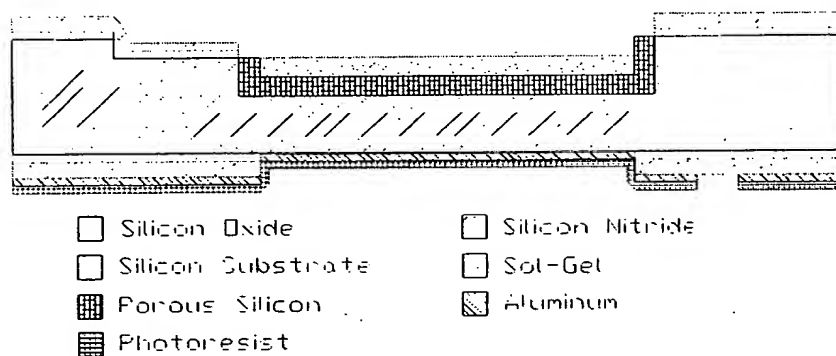
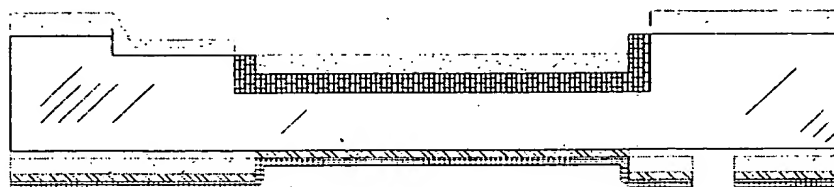
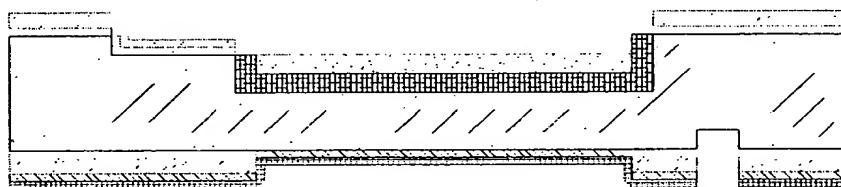


Fig. 104



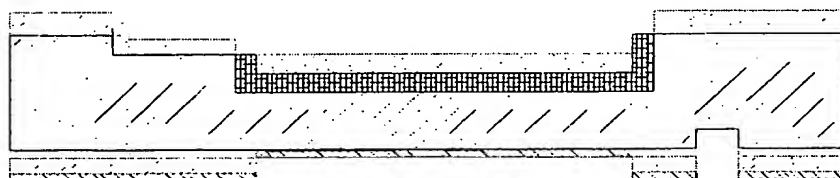
- | | |
|---|--|
| <input type="checkbox"/> Silicon Oxide | <input type="checkbox"/> Silicon Nitride |
| <input checked="" type="checkbox"/> Silicon Substrate | <input type="checkbox"/> Sol-Gel |
| <input checked="" type="checkbox"/> Porous Silicon | <input checked="" type="checkbox"/> Aluminum |
| <input checked="" type="checkbox"/> Photoresist | |

Fig. 105



- | | |
|---|--|
| <input type="checkbox"/> Silicon Oxide | <input type="checkbox"/> Silicon Nitride |
| <input checked="" type="checkbox"/> Silicon Substrate | <input type="checkbox"/> Sol-Gel |
| <input checked="" type="checkbox"/> Porous Silicon | <input checked="" type="checkbox"/> Aluminum |
| <input checked="" type="checkbox"/> Photoresist | |

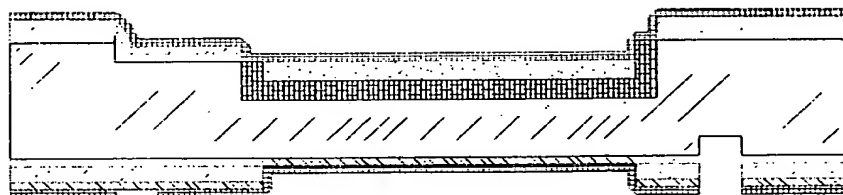
Fig. 106



- | | |
|--|--|
| <input type="checkbox"/> Silicon Oxide | <input type="checkbox"/> Silicon Nitride |
| <input type="checkbox"/> Silicon Substrate | <input type="checkbox"/> Sol-Gel |
| <input checked="" type="checkbox"/> Porous Silicon | <input checked="" type="checkbox"/> Aluminum |

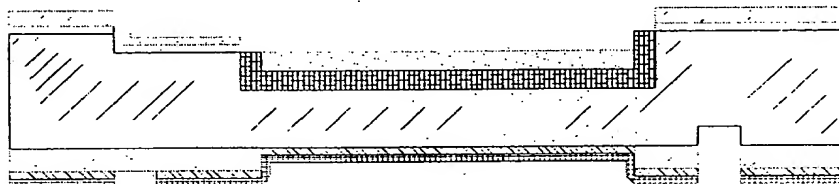
Fig. 107

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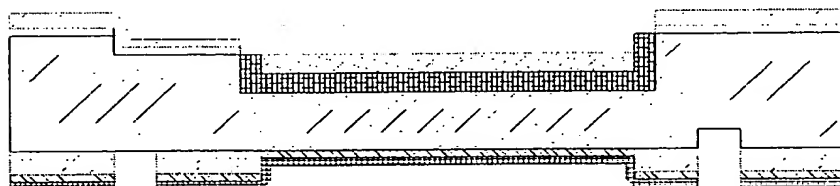
- | | |
|---|--|
| <input type="checkbox"/> Silicon Oxide | <input type="checkbox"/> Silicon Nitride |
| <input checked="" type="checkbox"/> Silicon Substrate | <input type="checkbox"/> Sol-Gel |
| <input checked="" type="checkbox"/> Porous Silicon | <input checked="" type="checkbox"/> Aluminum |
| <input checked="" type="checkbox"/> Photorealist | |

Fig. 108



- | | |
|---|--|
| <input type="checkbox"/> Silicon Oxide | <input type="checkbox"/> Silicon Nitride |
| <input checked="" type="checkbox"/> Silicon Substrate | <input type="checkbox"/> Sol-Gel |
| <input checked="" type="checkbox"/> Porous Silicon | <input checked="" type="checkbox"/> Aluminum |
| <input checked="" type="checkbox"/> Photorealist | |

Fig. 109



- | | |
|---|--|
| <input type="checkbox"/> Silicon Oxide | <input type="checkbox"/> Silicon Nitride |
| <input checked="" type="checkbox"/> Silicon Substrate | <input type="checkbox"/> Sol-Gel |
| <input checked="" type="checkbox"/> Porous Silicon | <input checked="" type="checkbox"/> Aluminum |
| <input checked="" type="checkbox"/> Photorealist | |

Fig. 110

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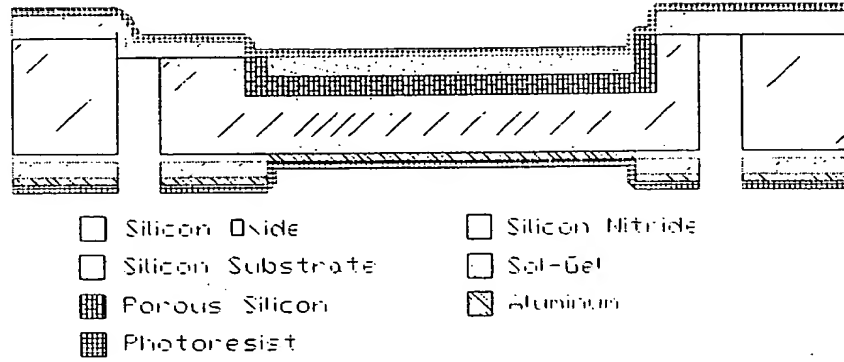


Fig. 111

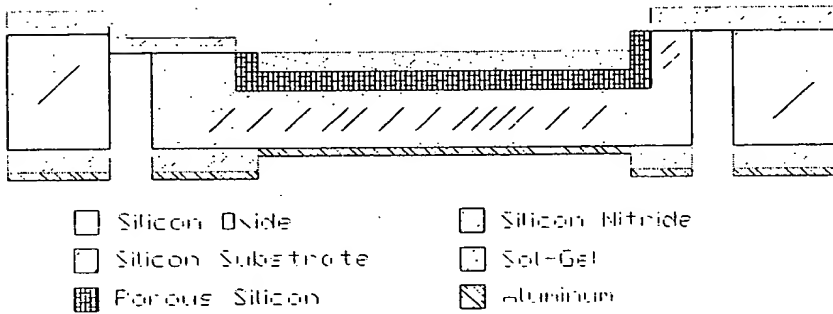


Fig. 112

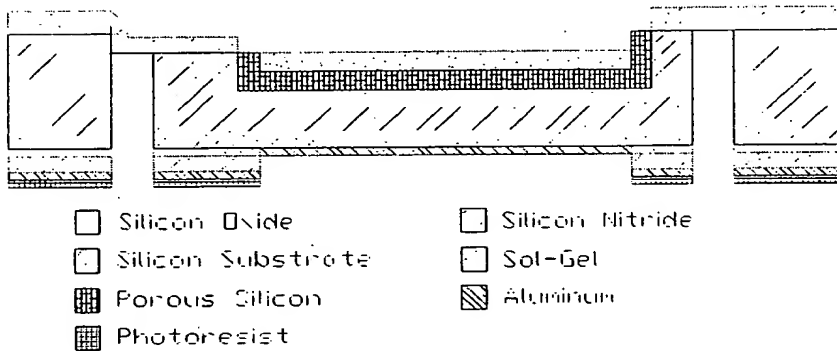


Fig. 113

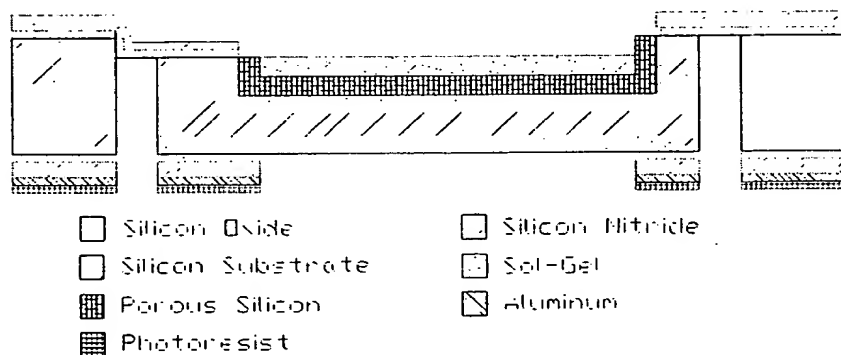


Fig. 114

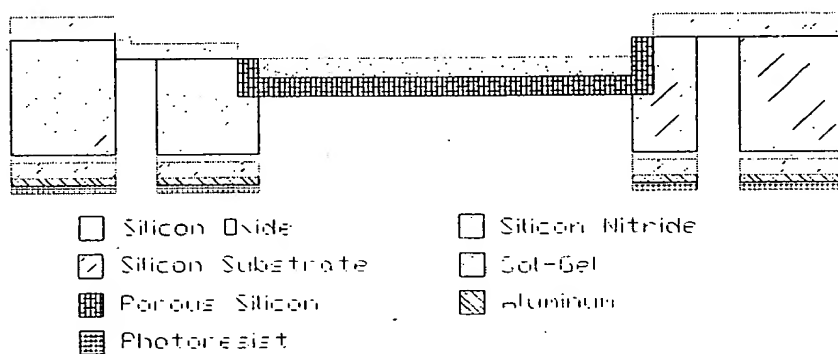


Fig. 115

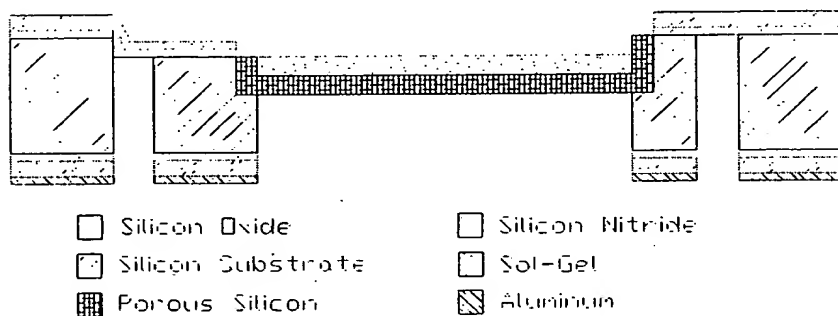


Fig. 116

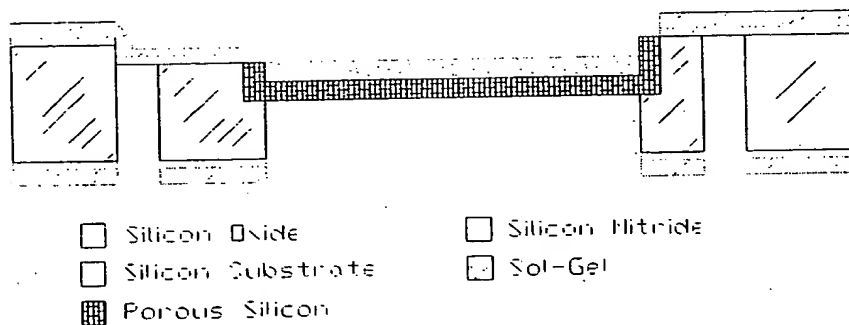


Fig. 117

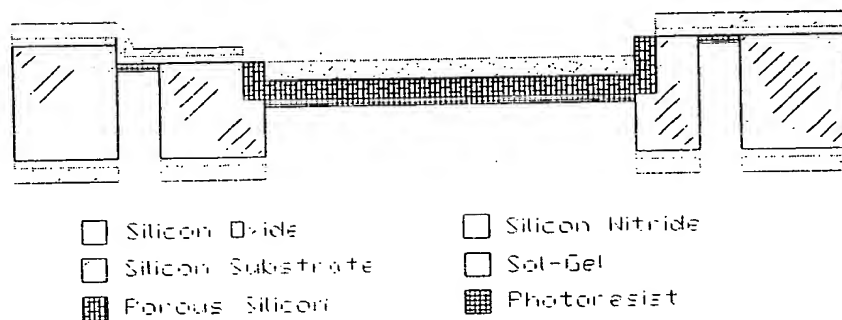


Fig. 118

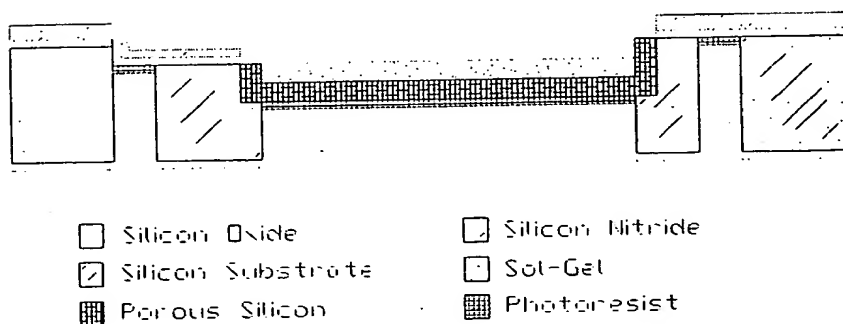
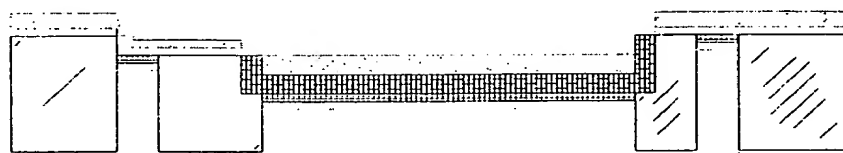


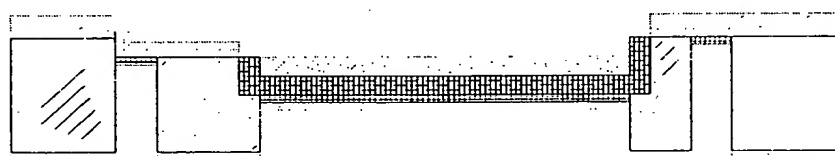
Fig. 119

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- | | |
|--|--|
| <input type="checkbox"/> Silicon Oxide | <input type="checkbox"/> Silicon Nitride |
| <input type="checkbox"/> Silicon Substrate | <input type="checkbox"/> Sol-Gel |
| <input checked="" type="checkbox"/> Porous Silicon | <input checked="" type="checkbox"/> Photore resist |
| <input type="checkbox"/> Titanium | |

Fig. 120



- | | |
|--|--|
| <input type="checkbox"/> Silicon Oxide | <input type="checkbox"/> Silicon Nitride |
| <input type="checkbox"/> Silicon Substrate | <input type="checkbox"/> Sol-Gel |
| <input checked="" type="checkbox"/> Porous Silicon | <input checked="" type="checkbox"/> Photore resist |
| <input type="checkbox"/> Titanium | <input type="checkbox"/> Gold |

Fig. 121



- | | |
|---|--|
| <input type="checkbox"/> Silicon Oxide | <input type="checkbox"/> Silicon Nitride |
| <input checked="" type="checkbox"/> Silicon Substrate | <input type="checkbox"/> Sol-Gel |
| <input checked="" type="checkbox"/> Porous Silicon | <input type="checkbox"/> Gold |
| <input type="checkbox"/> Titanium | |

Fig. 122

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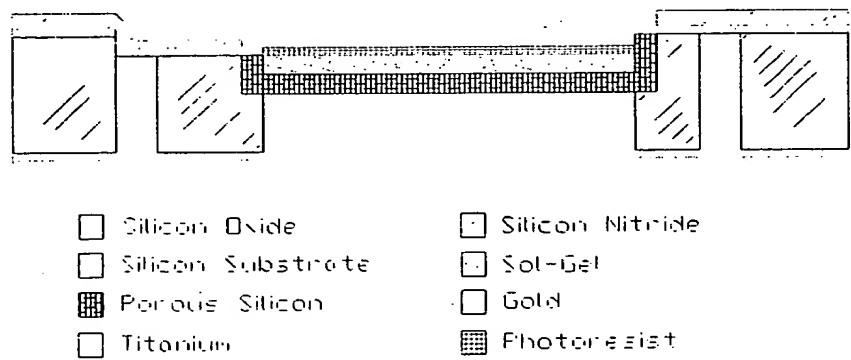


Fig. 123

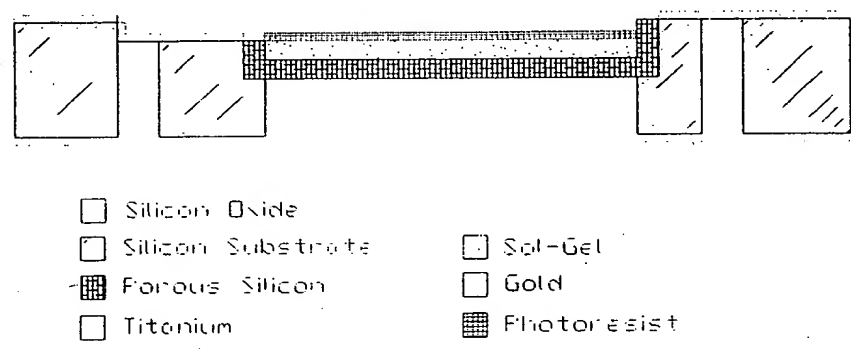


Fig. 124

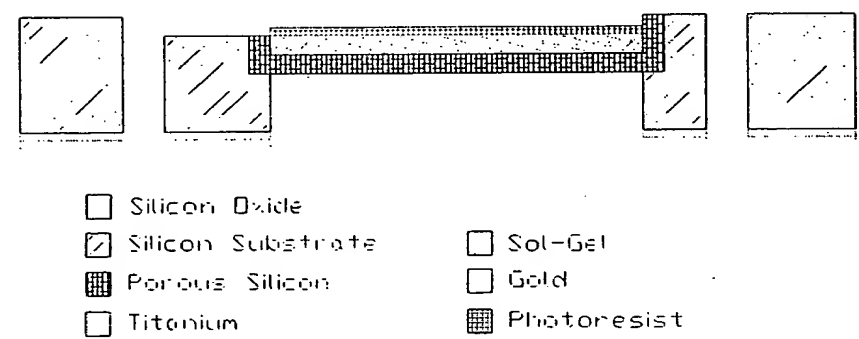
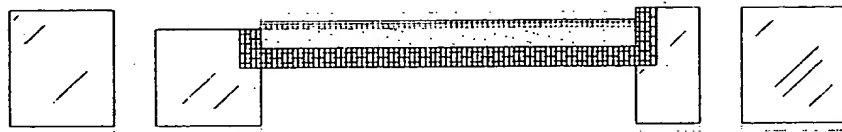
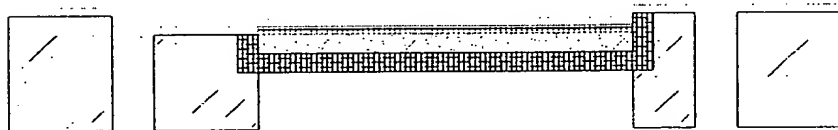


Fig. 125



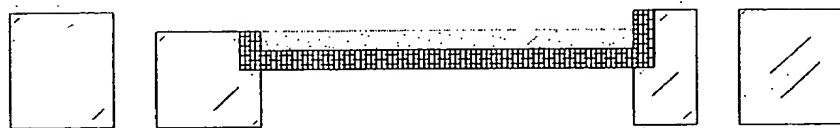
- | | |
|---|--|
| <input type="checkbox"/> Silicon Oxide | <input type="checkbox"/> Sol-Gel |
| <input checked="" type="checkbox"/> Silicon Substrate | <input type="checkbox"/> Gold |
| <input checked="" type="checkbox"/> Porous Silicon | <input checked="" type="checkbox"/> Photorealist |
| <input type="checkbox"/> Titanium | |

Fig. 126



- | | |
|--|--|
| <input type="checkbox"/> Silicon Oxide | <input type="checkbox"/> Sol-Gel |
| <input type="checkbox"/> Silicon Substrate | <input type="checkbox"/> Gold |
| <input checked="" type="checkbox"/> Porous Silicon | <input checked="" type="checkbox"/> Photorealist |
| <input type="checkbox"/> Titanium | |

Fig. 127

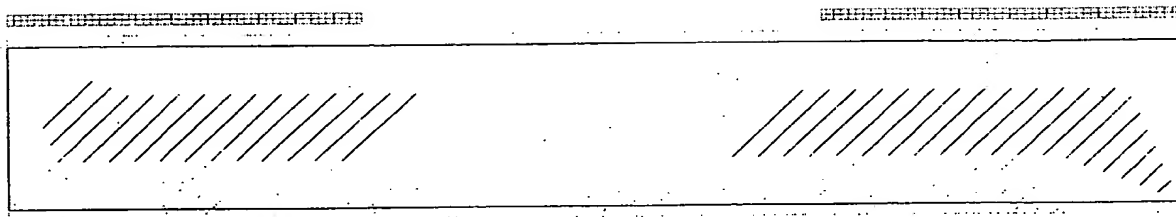


- | | |
|---|-----------------------------------|
| <input type="checkbox"/> Silicon Oxide | <input type="checkbox"/> Titanium |
| <input checked="" type="checkbox"/> Silicon Substrate | <input type="checkbox"/> Sol-Gel |
| <input checked="" type="checkbox"/> Porous Silicon | <input type="checkbox"/> Gold |

Fig. 128

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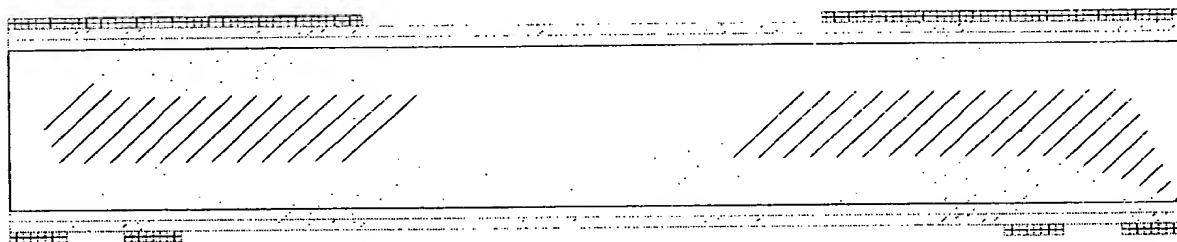
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- ☐ Silicon Oxide
- ☒ Silicon Substrate
- ☒ Photoresist

☐ Silicon Nitride

Fig. _____ 129

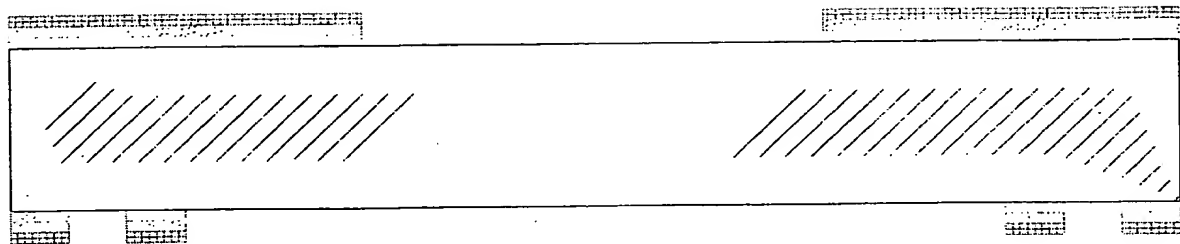


- ☐ Silicon Oxide
- ☒ Silicon Substrate
- ☒ Photoresist

☐ Silicon Nitride

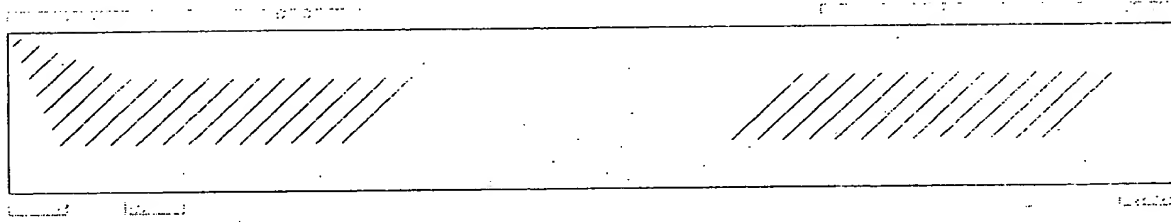
Fig. _____ 130

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- ☐ Silicon Oxide
- ☒ Silicon Substrate
- ☐ Silicon Nitride
- ☒ Photoresist

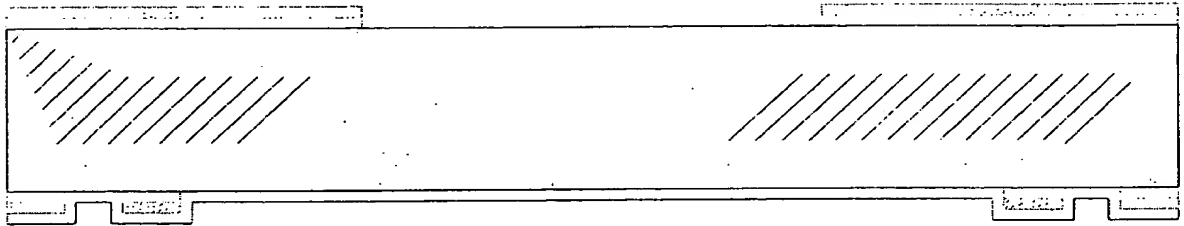
Fig. 131



- ☐ Silicon Oxide
- ☒ Silicon Substrate
- ☒ Silicon Nitride

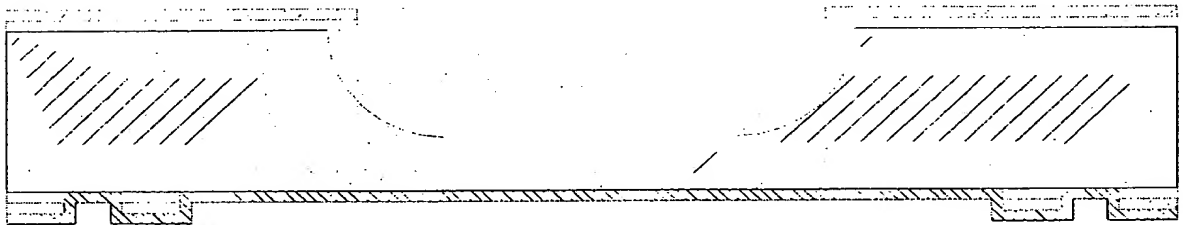
Fig. 132

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- | | |
|---|--|
| <input type="checkbox"/> Silicon Oxide | <input type="checkbox"/> Silicon Nitride |
| <input checked="" type="checkbox"/> Silicon Substrate | <input type="checkbox"/> Aluminum |

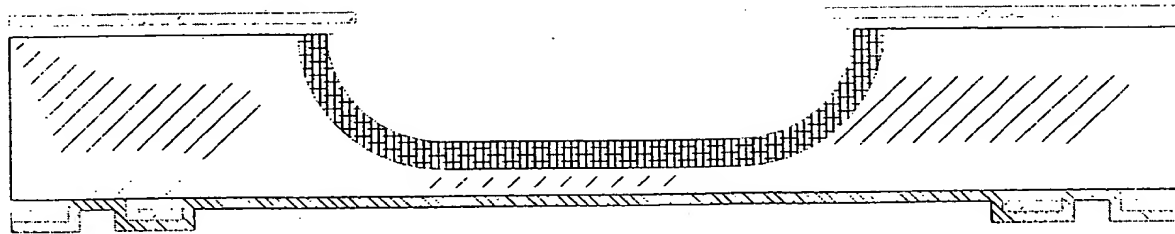
Fig. 133



- | | |
|--|--|
| <input type="checkbox"/> Silicon Oxide | <input type="checkbox"/> Silicon Nitride |
| <input type="checkbox"/> Silicon Substrate | <input checked="" type="checkbox"/> Aluminum |

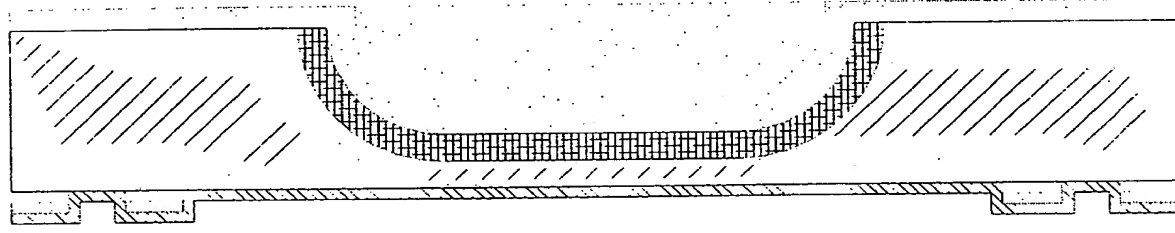
Fig. 134

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- | | |
|---|--|
| <input type="checkbox"/> Silicon Oxide | <input type="checkbox"/> Silicon Nitride |
| <input checked="" type="checkbox"/> Silicon Substrate | <input checked="" type="checkbox"/> Aluminum |
| <input checked="" type="checkbox"/> Porous Silicon | |

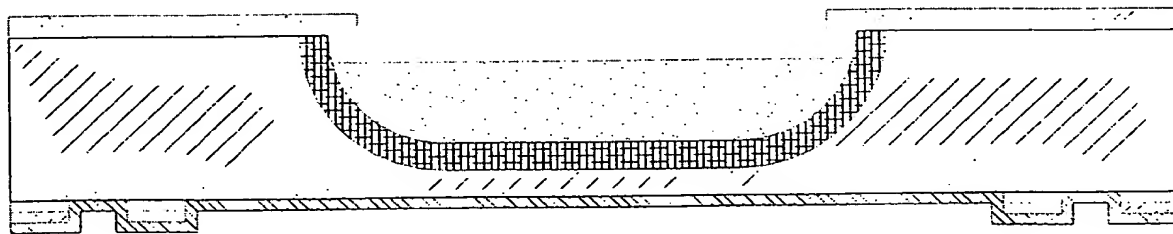
Fig. 135



- | | |
|---|--|
| <input type="checkbox"/> Silicon Oxide | <input type="checkbox"/> Silicon Nitride |
| <input checked="" type="checkbox"/> Silicon Substrate | <input checked="" type="checkbox"/> Aluminum |
| <input checked="" type="checkbox"/> Porous Silicon | |
| <input checked="" type="checkbox"/> Sol-Gel | |

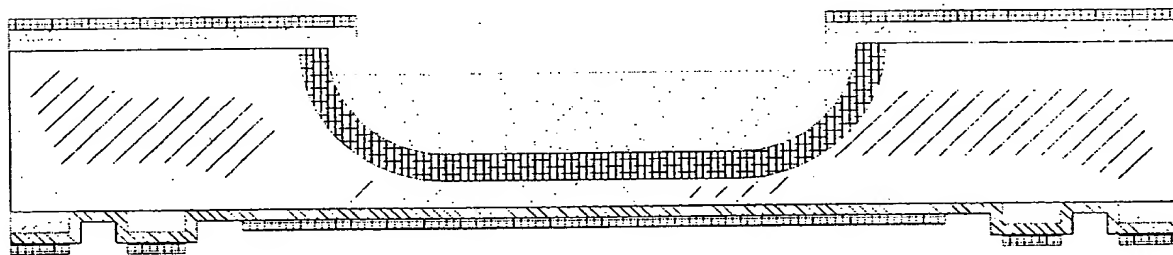
Fig. 136

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- | | |
|---|--|
| <input type="checkbox"/> Silicon Oxide | <input type="checkbox"/> Silicon Nitride |
| <input checked="" type="checkbox"/> Silicon Substrate | <input checked="" type="checkbox"/> Aluminum |
| <input checked="" type="checkbox"/> Porous Silicon | |
| <input type="checkbox"/> Sol-Gel | |

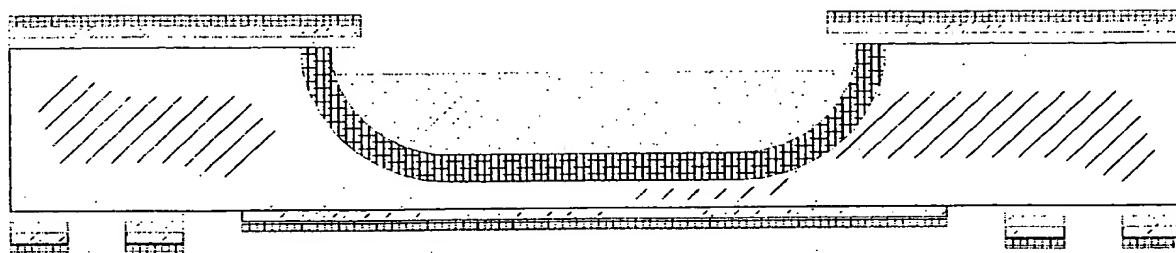
Fig. _____ 137



- | | |
|---|--|
| <input type="checkbox"/> Silicon Oxide | <input type="checkbox"/> Silicon Nitride |
| <input checked="" type="checkbox"/> Silicon Substrate | <input checked="" type="checkbox"/> Aluminum |
| <input checked="" type="checkbox"/> Porous Silicon | <input checked="" type="checkbox"/> |
| <input type="checkbox"/> Sol-Gel | |

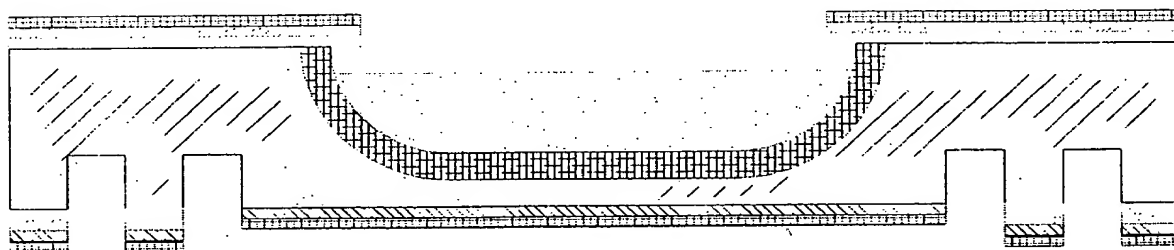
Fig. _____ 138

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- | | |
|--|--|
| <input type="checkbox"/> Silicon Oxide | <input type="checkbox"/> Silicon Nitride |
| <input type="checkbox"/> Silicon Substrate | <input type="checkbox"/> Aluminum |
| <input type="checkbox"/> Porous Silicon | <input type="checkbox"/> |
| <input type="checkbox"/> Sol-Gel | |

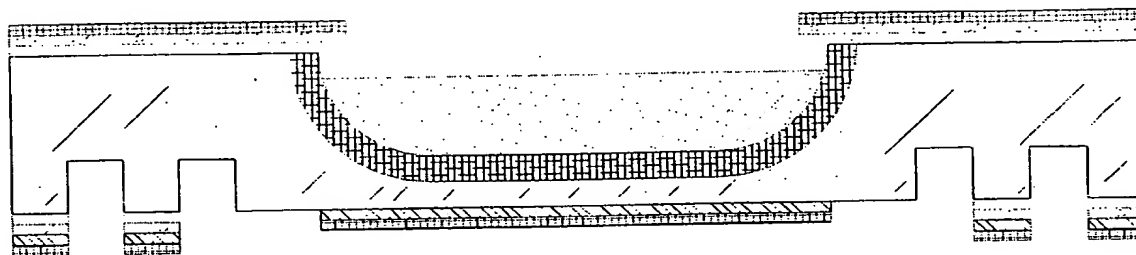
Fig. 139



- | | |
|--|--|
| <input type="checkbox"/> Silicon Oxide | <input type="checkbox"/> Silicon Nitride |
| <input type="checkbox"/> Silicon Substrate | <input type="checkbox"/> Aluminum |
| <input type="checkbox"/> Porous Silicon | <input type="checkbox"/> |
| <input type="checkbox"/> Sol-Gel | |

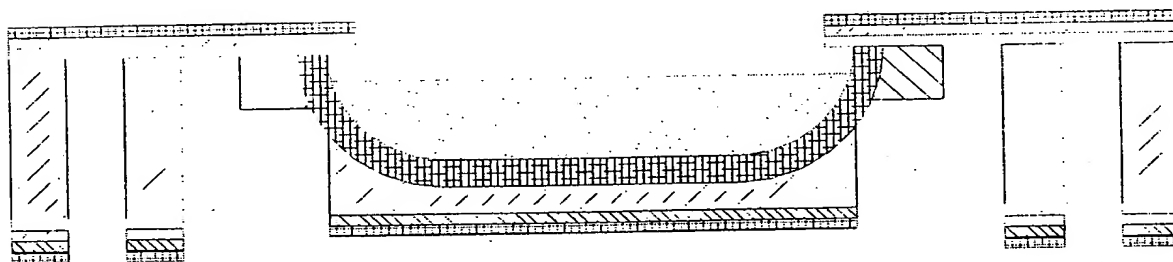
Fig. 140

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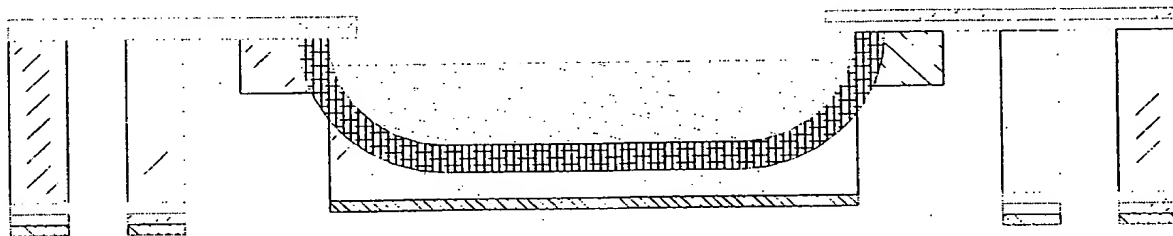
- | | |
|-------------------|-----------------|
| Silicon Oxide | Silicon Nitride |
| Silicon Substrate | Aluminum |
| Porous Silicon | Photoresist |
| Sol-Gel | |

Fig. 141



- | | |
|-------------------|-----------------|
| Silicon Oxide | Silicon Nitride |
| Silicon Substrate | Aluminum |
| Porous Silicon | Photoresist |
| Sol-Gel | |

Fig. 142







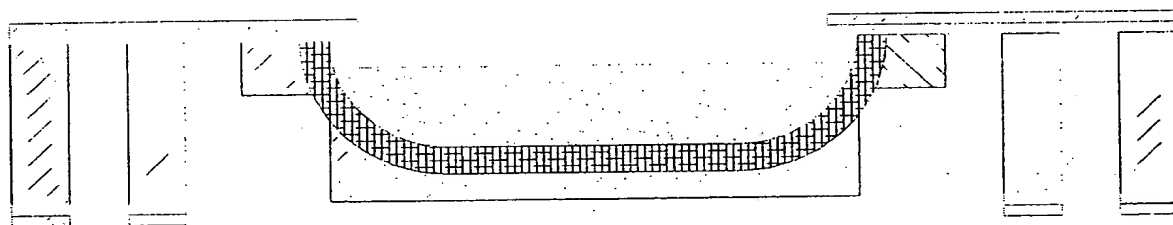
- | | |
|---|---|
|  Silicon Oxide |  Silicon Nitride |
|  Silicon Substrate |  Aluminum |
|  Porous Silicon | |

Fig. 143







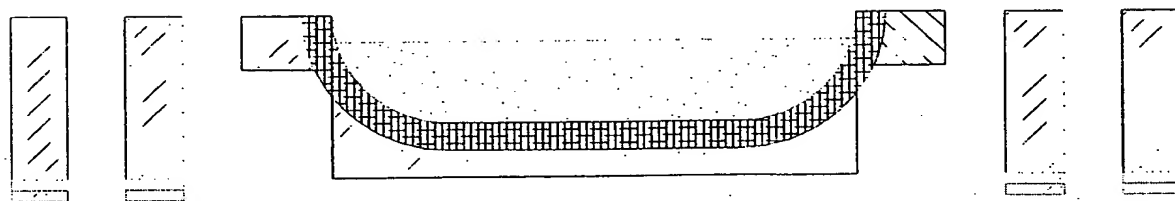
- | | |
|---|---|
|  Silicon Oxide |  Silicon Nitride |
|  Silicon Substrate | |
|  Porous Silicon | |

Fig. 144

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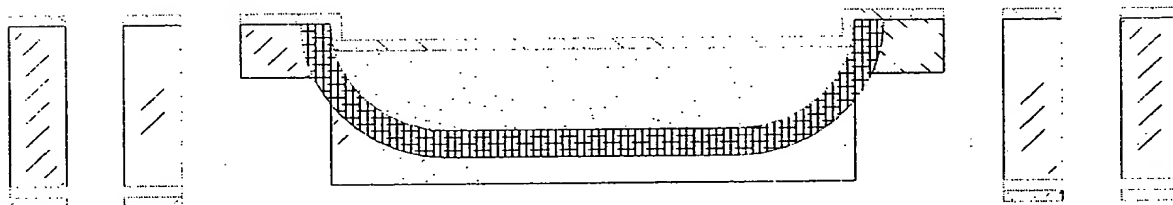
- | | |
|---|---|
|  Silicon Oxide |  Silicon Nitride |
|  Silicon Substrate | |
|  Porous Silicon | |

Fig. ____ 145








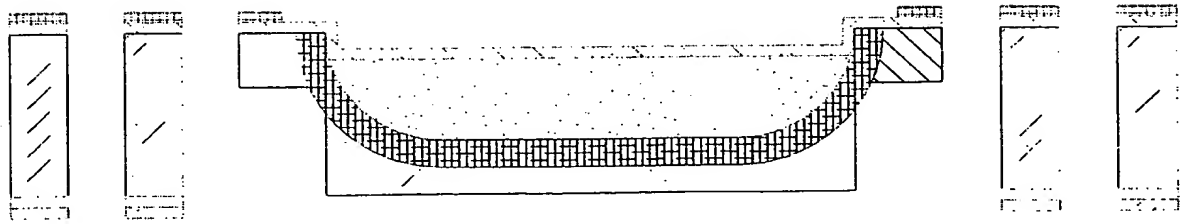
- | | |
|---|---|
|  Silicon Oxide |  Silicon Nitride |
|  Silicon Substrate |  Palladium |
|  Porous Silicon | |

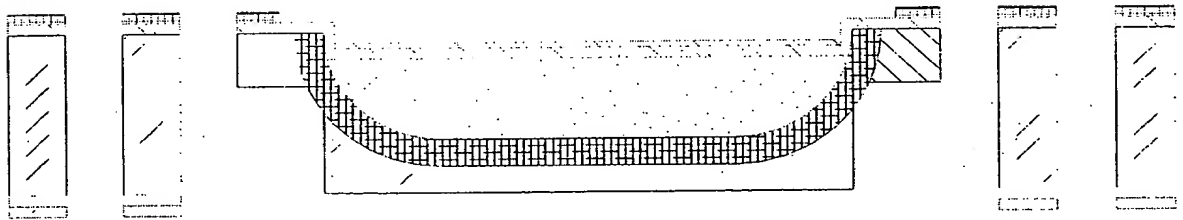
Fig. ____ 146

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- | | |
|-------------------|-----------------|
| Silicon Oxide | Silicon Nitride |
| Silicon Substrate | Palladium |
| Porous Silicon | Photoresist |

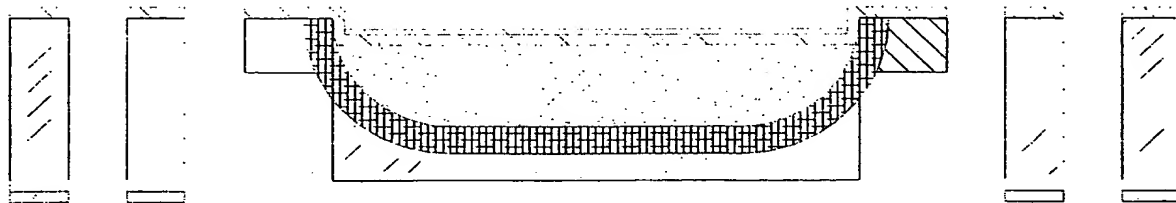
Fig. 147



- | | |
|-------------------|-----------------|
| Silicon Oxide | Silicon Nitride |
| Silicon Substrate | Palladium |
| Porous Silicon | Photoresist |

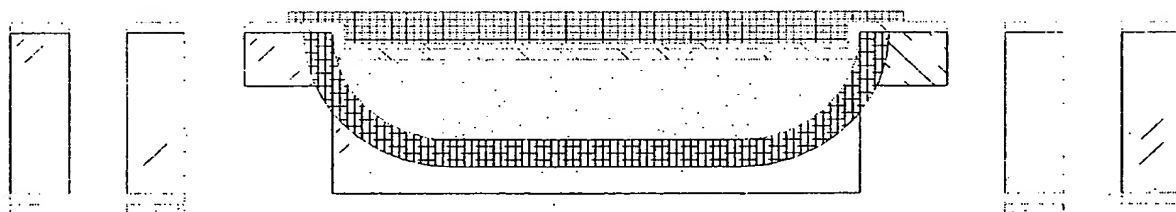
Fig. 148

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- | | |
|--|---|
| <input type="checkbox"/> Silicon Oxide | <input type="checkbox"/> Silicon Nitride |
| <input type="checkbox"/> Silicon Substrate | <input type="checkbox"/> Palladium |
| <input checked="" type="checkbox"/> Porous Silicon | <input checked="" type="checkbox"/> Photoresist |

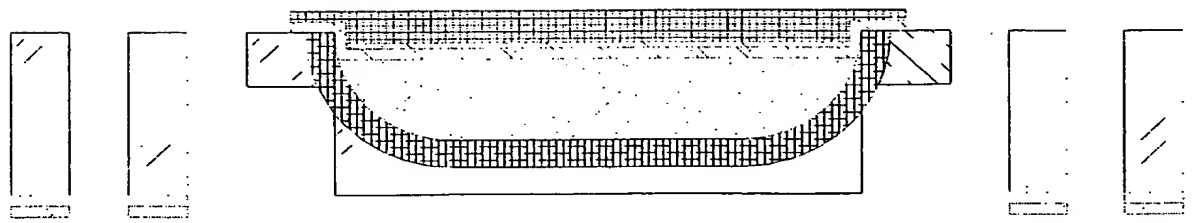
Fig. _____ 149



- | | |
|--|---|
| <input type="checkbox"/> Silicon Oxide | <input type="checkbox"/> Silicon Nitride |
| <input type="checkbox"/> Silicon Substrate | <input type="checkbox"/> Palladium |
| <input checked="" type="checkbox"/> Porous Silicon | <input checked="" type="checkbox"/> Photoresist |
| <input type="checkbox"/> Sol-Gel | |

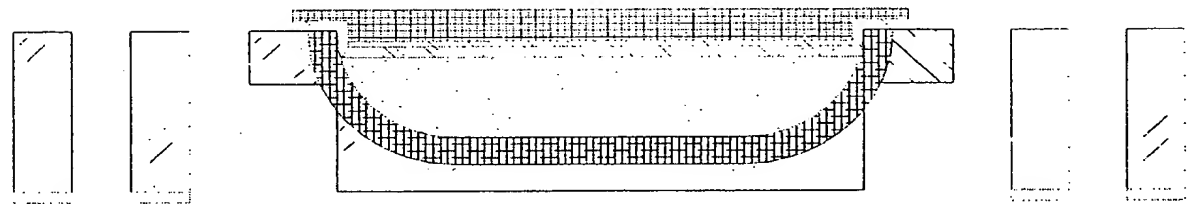
Fig. _____ 150

09858327.051504



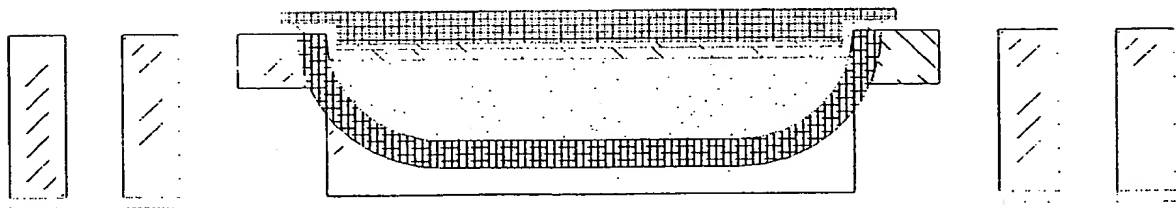
- | | |
|--|--|
| <input type="checkbox"/> Silicon Oxide | <input type="checkbox"/> Silicon Nitride |
| <input type="checkbox"/> Silicon Substrate | <input type="checkbox"/> Palladium |
| <input checked="" type="checkbox"/> Porous Silicon | <input checked="" type="checkbox"/> Photorealist |
| <input type="checkbox"/> Sol-Gel | |

Fig. 151



- | | |
|--|--|
| <input type="checkbox"/> Silicon Oxide | <input type="checkbox"/> Silicon Nitride |
| <input type="checkbox"/> Silicon Substrate | <input type="checkbox"/> Palladium |
| <input checked="" type="checkbox"/> Porous Silicon | <input checked="" type="checkbox"/> Photorealist |
| <input type="checkbox"/> Sol-Gel | |

Fig. 152



- | | |
|--|---|
| <input type="checkbox"/> Silicon Oxide | <input type="checkbox"/> Silicon Nitride |
| <input type="checkbox"/> Silicon Substrate | <input type="checkbox"/> Palladium |
| <input checked="" type="checkbox"/> Porous Silicon | <input checked="" type="checkbox"/> Photoresist |
| <input checked="" type="checkbox"/> Col-Gel | <input type="checkbox"/> Ti-Tungsten |
| | <input type="checkbox"/> Gold |

Fig. _____ 153

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